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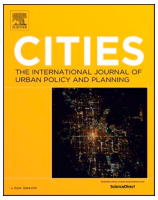

Social and physical environments in dementia-inclusive societies: A scoping review of the dementia-friendly cities and communities' literature

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ABSTRACT

Introduction: Dementia-friendly societies are an essential development as the global population ages. The physical and social environments shape and support the independence, safety, and quality of life of people living with dementia. The World Health Organization developed a framework comprising ten domains that guide dementia-friendly initiatives, but to date operational definitions are missing which limit its applicability. Therefore, the aim of this study was to define and operationalise the ten domains defined by the World Health Organization by synthesizing empirical and conceptual literature on people living with dementia, their carers, and communities.
Methods: This study conducted a large-scale scoping review following the PRISMA-ScR protocol. Using tailored search strategies across multiple academic databases, the literature was systematically synthesised. In addition to traditional database searches, a linguistic search strategy using AI-driven tools was employed to identify relevant studies that might not have surfaced in conventional keyword-based searches; these tools supplemented, not replaced, hand screening. The review focused on the lived experiences of people living with dementia, their carers, and community members.
Results: This scoping review shows how the ten WHO domains can be operationalised and how they interact, emphasising safety beyond infrastructure, housing as identity, and meaningful social participation. Two cross-domain barriers proved crucial for translating these domains into effective, inclusive strategies: 'stigma' and 'constrained accessibility': (i) the physical environment (transport, buildings, wayfinding) and (ii) access to communication, information and technology.
Conclusion: Policymakers, urban planners and healthcare providers can use these operational features to design, implement and evaluate targeted interventions. Implementation brings challenges in capacity, coordination and equity; accordingly, the features are presented as a flexible basis for context-appropriate adaptation and staged evaluation.

1. Introduction

Dementia is a multifaceted syndrome that affects cognition and memory. Around 55 million people worldwide live with dementia, projected to reach 78 million by 2030, emphasising the need for coordinated, person-centred strategies across health and social care (Cataldi et al., 2022). As cities continue to grow and urbanise, the built environment plays a crucial role in shaping the everyday experiences of people living with dementia (PLWD). From accessible public spaces to well-planned housing solutions, urban design can either enable or restrict their independence (for instance, through clear wayfinding and signage, adequate lighting and visual contrast, sufficient rest points and toilets, and reliable transport information) (Giebel et al., 2024; Hung et al., 2021; Lanthier-Labonté et al., 2024). Therefore, cities play an increasingly pivotal role in ensuring equitable access to health, care, and support for PLWD and their carers, (Vučković & Adams, 2022). Beyond

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its considerable effects on cognitive function and physical health, dementia profoundly impacts the social relationships, emotional stability, and the overall quality of life not only of those diagnosed with the condition but also of their families, carers, and the broader community in which they reside (Livingston et al., 2017). A crucial response to this growing concern is the development of dementia-inclusive societies (World Health Organization, 2021), which is often referred to as dementia-friendly cities and communities in analogy to the age-friendly movement (World Health Organization, 2007a, 2007b; World Health Organization, 2021). Dementia-friendly societies advocate for urban environments that are inclusive, safe, and accessible for all. Developing dementia-friendly societies requires a shift in urban planning paradigms, embedding dementia-friendly principles in infrastructural projects, zoning laws, and community development initiatives. Urban and community settings (such as housing, public spaces and buildings, transport, health and social care services) should empower PLWD and their carers to lead lives marked by dignity, respect, and complete inclusion, all while being freed from the widespread stigma and discrimination that frequently accompany a dementia diagnosis (Nguyen & Li, 2020).

The social and physical settings where PLWD live influence the degree of inclusivity and support available to them, significantly affecting their overall quality of life (Craig et al., 2024; Jing et al., 2016; Moyle et al., 2011).The urban infrastructure, the way public spaces are designed, as well as housing policies shape the extent to PLWD can maintain their autonomy and social engagement. Social environment encompasses the various relationships individuals hold, the cultural norms and customs that shape their interactions, and the dynamics of the communities they belong to, while the physical environment includes essential components such as infrastructure, housing options, and public areas that individuals navigate daily (Sturge et al., 2021). Together, these interconnected aspects play a crucial role in shaping the experiences of PLWD, thus emphasising the need for environments that not only encourage autonomy and accessibility but also improve the overall quality of life for these individuals.

The World Health Organization (WHO), acknowledging the pressing need for focused action, has created a foundational framework to guide initiatives aimed at cultivating dementia-friendly environments, introducing a collection of ten distinct domains derived from the well-established Age-Friendly Cities and Communities' (AFCC) framework (World Health Organization, 2007a; World Health Organization, 2007b). The eight domains identified in the AFCC framework are housing, social participation, respect and social inclusion, civic participation and employment, communication and information, community support and health services, outdoor spaces and buildings, and transport. Along this policy lineage, two domains, ‘safety’ and ‘carer support’, were added to the original eight age-friendly topic areas, yet operational feature sets and measurement criteria of all ten dementia-friendly domains remain under-specified, complicating policy alignment and the implementation of the dementia-friendly notions (Dikken et al., 2020; World Health Organization, 2021).These ten dementia-friendly domains highlight where targeted interventions can effectively impact the lives of those affected by dementia (World Health Organization, 2021). While the WHO present all domains separately, the social and physical domains are interdependent: physical design gains meaning when embedded in social practices (such as the reduction of stigma, carer support, participation) and vice versa. In this review, the evidence based operational features are specified for each domain to support design, delivery and evaluation. However, despite the clear identification of these domains, operational definitions remain largely absent in the dementia-friendly context, especially the two domains of safety and carer support, creating obstacles for research and informed policy response ((Dikken et al., 2020; World Health Organization, 2021).

In order to address these challenges, this scoping review is conducted to map and synthesize literature on the WHO ten dementia-friendly domains with the goal of operationalising them. By specifying evidence-based operationalisations for each WHO domain, the study provides shared terminology and measurable features to support evidence-based policy and international programmes, supporting global cooperation and knowledge-sharing. This scoping review synthesises evidence from studies that centre the lived-experiences and perspectives of PLWD, their family members or informal carers, and community members such as neighbours. The operationalisation of these domains is not just a theoretical endeavour; it is a vital step toward enhancing the understanding of dementia-friendly societies and actively promoting environments that truly support meaningful inclusion for PLWD. The aim of this study is to provide guidance for urban planners, policymakers, and architects seeking to create inclusive cities, aligning physical design with social practices that reduce stigma, support carers, and promote meaningful participation. Therefore the following research question was set: *What operational, evidence-based features define and enable each of the WHO's ten dementia-friendly domains in urban and community settings, as reported by PLWD, family/informal carers, and community actors?*

2. Methodology

2.1. Review framework and protocol

This scoping review was reported in accordance with the PRISMA-ScR guidelines (Tricco et al., 2018), ensuring a systematic and transparent approach. Prior to the initiation of the review, a detailed protocol was developed by the researchers. The protocol delineated a priori the study objectives, research question, eligibility criteria, search strategy, data extraction process, and synthesis methods. The protocol aimed to enhance the methodological rigour and reproducibility of this review. A scoping review design was chosen to map the breadth and conceptual boundaries of evidence rather than estimate effects, following foundational guidance (Arksey & O'Malley, 2005; Levac et al., 2010; Peters et al., 2020). This choice aligns with the aim of this study to operationalise domains across heterogeneous study types and grey literature common in urban planning. The epistemic stance is pragmatic and pluralist: multiple forms of knowledge, including lived-experience accounts, inform the operational features; quality appraisal informed interpretation but did not determine inclusion. Descriptive thematic synthesis and domain-based charting were used to derive operational features, with two reviewers independently extracting and reconciling codes. To reduce retrieval bias, database searches were complemented with an artificial intelligence (AI)-driven research discovery tool and a citation-based research tool that enables network-driven exploration of the academic literature (snowballing).

2.2. Inclusion and exclusion criteria

This scoping review included peer-reviewed studies that examined the WHO's ten domains for dementia-friendly environments (safety, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, carer support, community support and health services, outdoor spaces and buildings, and transportation). To ensure comprehensive coverage, each WHO domain was translated into a distinct search string, resulting in ten separate searches. The review specifically focused on the perspectives of community-living PLWD, their family members and/or informal carers, and community members such as neighbours. To capture recent advancements in the field, only studies published between January 2015 and January 2025 and published in English were considered eligible for inclusion.

Studies were excluded based on the following criteria:

- Not related to dementia.
- Not focused on individuals living at home.
- Not conducted in community or neighbourhood settings.

- Did not report lived-experience evidence from PLWD, their family/informal carers or community members.
- Focused primarily on medical or clinical interventions (for instance, shared decision-making).
- Investigated neighbourhood factors solely as predictors of dementia or cognitive decline.

The screening process was conducted in multiple stages. Initially, after removal of duplicates, studies were assessed at the title level to remove clearly ineligible articles. Subsequently, abstracts were reviewed to refine the selection further, ensuring that only studies aligned with the research objectives progressed to full-text assessment.

2.3. Search strategy and data sources

A comprehensive and systematic search was conducted across three major academic databases: Web of Science, PubMed, and CINAHL. The search covered studies published between the end of January 2015 and the end of January 2025, with the final search completed on February 1, 2025. To ensure thorough coverage of the topic, Boolean search strings were developed for each of the ten WHO domains relevant to dementia-friendly environments (Supplementary file 1, peer-reviewed by an information specialist from the university. These database searches constituted the core identification approach; all additional techniques for the identification described below were strictly supplementary.

In addition to traditional database searches, SciSpace (SciSpace, n.d.), an AI-driven research discovery tool designed to enhance literature searches by leveraging natural language processing (NLP) and machine learning algorithms was incorporated. SciSpace was used solely to augment identification and did not replace conventional database searches. Unlike traditional keyword-based searches, SciSpace processes research queries in a context-aware manner, allowing it to identify articles that are conceptually relevant—even if they do not contain the exact search terms. To optimise the search strategy, a language-based search sentence based on the Boolean search string for each WHO domain was developed (Supplementary file 1). These refined search sentences were entered into SciSpace to retrieve the 10 most relevant articles per domain based on semantic similarity and citation networks. The results from SciSpace were systematically compared to the articles retained after the abstract screening phase. AI-surfaces records were then processed exactly like all other records: title/abstract screening, full-text eligibility, appraisal, data charting, and synthesis were conducted by two independent reviewers (with third reviewer adjudication); AI was not used for screening, eligibility, appraisal, data charting, or synthesis. Duplicate entries were removed, and any newly identified relevant studies were included in the abstract screening process to ensure that important literature was not overlooked. Introducing an additional linguistic search strategy into the methodology helped to capture studies that might not have surfaced in conventional database searches, particularly those with alternative terminology or interdisciplinary relevance, or being published in another database then Web of Science, PubMed, and CINAHL. This approach enhances the comprehensiveness and robustness of the literature mapping process, which is particularly valuable in a broad and evolving field such as dementia-friendly environments.

To further ensure completeness and depth, a snowballing strategy using ResearchRabbit (ResearchRabbit, n.d.), a citation-based research tool that enables network-driven exploration of academic literature was done. Snowballing is a widely recognised supplementary search technique in systematic reviews, wherein references cited by relevant articles (backward snowballing) and subsequent papers citing those articles (forward snowballing) are examined for potential inclusion. For all studies that proceeded to full-text screening, ResearchRabbit was used to identify highly cited and thematically relevant studies within the topic area. This tool visualises citation networks, allowing us to explore relationships between articles, track the evolution of key concepts, and identify potential gaps in the literature. By applying ResearchRabbit's citation-tracking features, review articles and their referenced studies were systematically screened, ensuring that older and newer relevant foundational research was not inadvertently omitted. Any additional studies meeting the predefined inclusion criteria were subsequently assessed for full-text screening and inclusion in this review.

The combination of database searches, AI-driven literature discovery, and citation network analysis ensured a rigorous, transparent, and comprehensive approach to mapping the available evidence on dementia-friendly environments. The PRISMA-ScR flow diagram reports the incremental yield from AI-assisted identification separately for transparency.

2.4. Study selection, screening, and data extraction

A systematic selection and screening process was conducted to ensure transparency and reproducibility. All identified studies underwent a two-stage screening process using Rayyan, a web-based tool designed to streamline systematic reviews and facilitate collaboration.

The first stage involved title and abstract screening, where two independent reviewers assessed all retrieved articles against the predefined inclusion and exclusion criteria. Empirical studies of any design were included and, where justified, review articles that provided conceptual synthesis pertinent to defining/operationalising the WHO domains or summarised evidence from under-studied domains. Reviews were labelled as such at extraction and used to identify additional primary studies and triangulate domain features. To manage overlap, when a review synthesised primary studies that were also included, the primary studies anchored the evidence and the review's contribution was limited to conceptual framing; not counting double findings. Inclusion was not quality-based; appraisal informed interpretation only, consistent with a scoping aim. Studies that met the inclusion criteria proceeded to full-text screening, which formed the second stage. During full-text screening, articles were carefully reviewed to confirm their eligibility. In cases where discrepancies arose between reviewers, these were resolved through discussion and consensus. If no agreement was reached, a third independent reviewer was consulted to ensure an objective decision-making process. This rigorous, multi-stage approach was designed to minimise bias and enhance the reliability of study inclusion. The PRISMA flow diagram (Fig. 1) visually summarises the study selection process, including the number of studies retrieved, screened, excluded, and ultimately included in the review.

Following study selection, a standardised data extraction form was used to systematically chart key information from each included study. This form was pretested on a subset of studies to ensure clarity, consistency, and reliability before full-scale extraction. The extracted data included information on study characteristics (such as author(s), year of publication, country of origin, and study design), population demographics (including sample size, age, gender, and the living situation of PLWD), and the intervention or contextual focus (such as the specific WHO domain addressed, community or environmental modifications, and relevant policy measures). Additionally, key findings were documented, particularly those relating to the operationalisation of the ten WHO domains.

As with the screening process, discrepancies in extracted data were resolved through discussion and consensus to ensure accuracy and reliability. The extracted data provide a structured synthesis of the current evidence on dementia-friendly environments.

2.5. Appraisal and data synthesis

A structured methodological characterisation, rather than a tool-based critical appraisal of the studies included was conducted using two individual researchers, disagreements were resolved by discussion. They discussed (beyond methodological rigour) conceptual clarity and fit between aims and design; sampling and context; data-collection

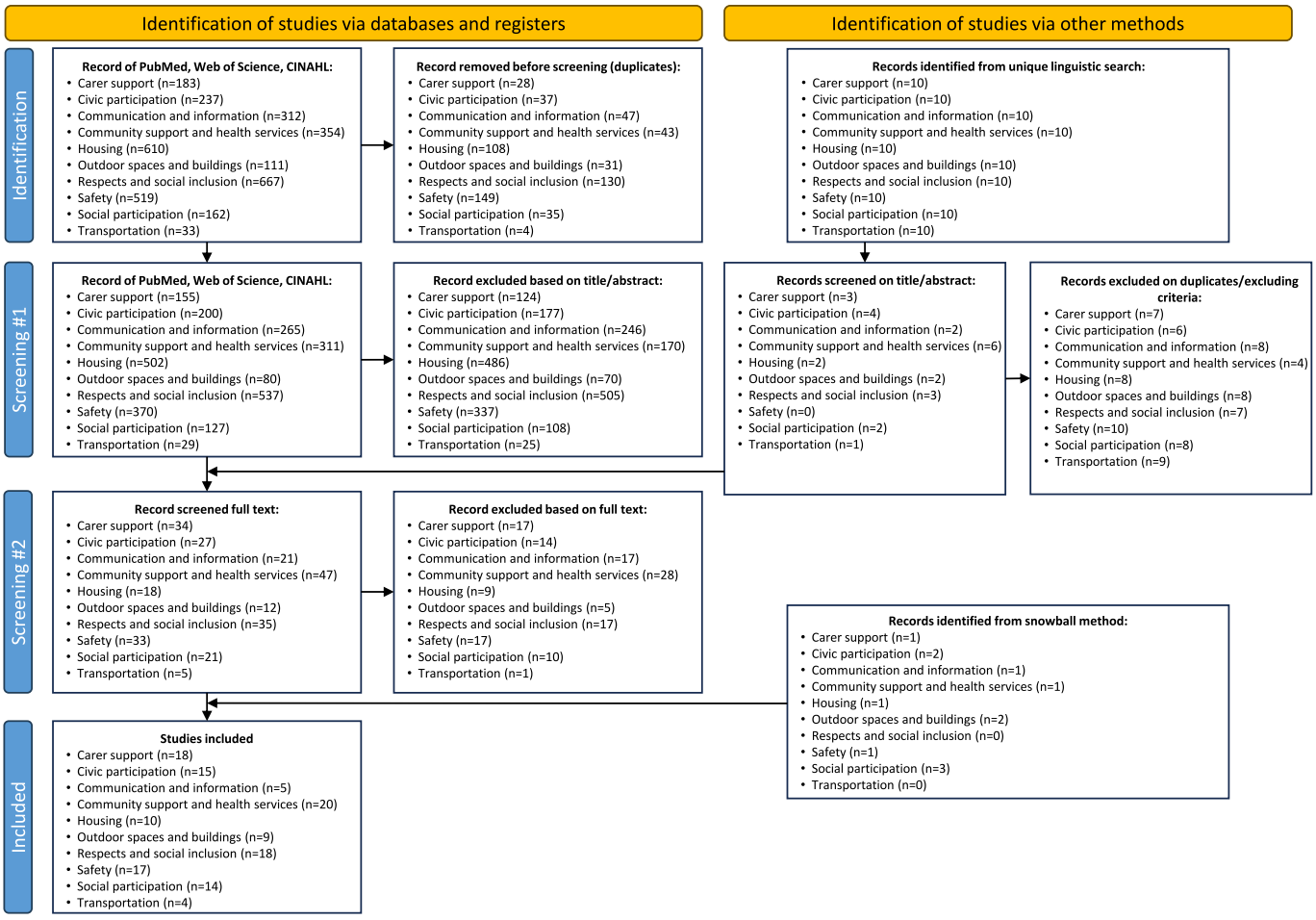

Fig. 1. PRISMA flow diagram.

procedures; and relevance/transferability to the WHO domains. While this assessment provided valuable insights into the methodological rigour and reliability of the selected studies, it did not serve as an exclusion criterion. As scoping reviews are designed to map the breadth and nature of available evidence, rather than to evaluate study quality for exclusion, all eligible studies were retained regardless of their methodological strength. However, the appraisal process facilitated a more nuanced interpretation of the findings, allowing to contextualise the study limitations and variations in methodological approaches. Therefore, appraisal judgements informed the weighting and interpretation of findings in the synthesis and were used to flag domains with thinner or less robust evidence. To synthesize the findings, a descriptive thematic synthesis was applied, focusing on key themes, patterns, and gaps in the literature in line with scoping-review guidance (Arksey & O'Malley, 2005; Levac et al., 2010; Peters et al., 2020). Quantitative data were systematically tabulated, providing an overview of study characteristics, sample sizes, and primary outcomes. Qualitative and mixed-methods findings were coded independently by two reviewers using an inductive–deductive approach, with discrepancies resolved by discussion; codes were organised into descriptive themes and then mapped to domain-level operational features via constant comparison (Braun & Clarke, 2006). This synthesis allowed us to draw comparisons across studies, highlight emerging trends, and pinpoint areas requiring further investigation.

3. Results

This scoping review explores the ten core dimensions of dementia-friendly societies as presented by the WHO (World Health Organization, 2021). The results highlight how the interaction between social and physical environments shapes the quality of life, autonomy, and participation for PLWD. Rather than being solely dependent on either social or physical factors, dementia-friendly emerges from their dynamic interplay. The physical environment—including urban design, housing modifications, and accessible transportation—lays the foundation for mobility and safety. However, its effectiveness is significantly shaped by social factors such as stigma, social support networks, and policy frameworks. For example, while dementia-friendly wayfinding and adaptable housing support independence, their impact is limited without broader community awareness and inclusion efforts that reduce stigma and discrimination.

The following ten sections explore distinct but interconnected themes that contribute to dementia-friendly societies. Each theme addresses specific aspects such as housing, social participation, and safety, while collectively reinforcing overarching principles such as independence, dignity, equality, accessibility, and respect. While these domains function as independent contributors to dementia-friendly initiatives, their interconnections form a broader framework that aligns with societal goals of inclusion and well-being. By synthesizing current literature on each domain, this review aims to offer a structured foundation for policy development, future research, and practical implementation. Through an in-depth examination of these ten themes, this review highlights the complexities and synergies involved in fostering dementia-friendly environments.

A detailed summary of the extracted studies is provided in the supplementary file 2.

3.1. Safety

Ensuring safety within dementia-friendly neighbourhoods is a complex challenge requiring a balance between autonomy, community support, and technological interventions. The reviewed literature highlights several key themes that contribute to enhancing safety for PLWD while maintaining their quality of life

3.1.1. Environmental and physical safety

The built environment plays a crucial role in dementia safety. Wayfinding and orientation measures, such as clear signage and recognisable landmarks, help prevent missing incidents, which are common in dementia care (Rowe et al., 2015; White & Montgomery, 2016). Safe mobility infrastructure, including well-designed pedestrian crossings and adapted public transportation, enables independent movement while mitigating risks (White & Montgomery, 2016). Additionally, fall prevention through home adaptations and community interventions is necessary, as falls are a major safety concern for both PLWD and their carers (Zhou, Berridge, et al., 2024; Zhou, Thakkar, et al., 2024. Park and Lee (2024) emphasise that non-pharmacological interventions, such as environmental adjustments and carer support, are critical in managing wandering behaviours, further enhancing safety.

3.1.2. Social and community safety

Community awareness and social support are essential for safety in dementia-friendly neighbourhoods. Informal carers play a significant role in managing safety risks, yet they often experience stress and lack proper guidance (Silva et al., 2023). Social engagement within dementia-friendly communities can reduce isolation and enhance safety through mutual support networks (Cooper et al., 2021; Haikio et al., 2019). Effective risk communication between families, carers, and healthcare providers is crucial in mitigating hazards such as financial exploitation, falls, and getting lost (Stevenson & Taylor, 2018). Zhou, Thakkar, et al. (2024) highlights that falls among PLWD significantly increase carer burden, requiring tailored interventions and better coordination in fall prevention strategies.

3.1.3. Risk management and autonomy

A key tension in dementia care is balancing autonomy with safety. While excessive restrictions may impair well-being, allowing too much freedom can increase risks such as wandering and falls (Cooper et al., 2021; Smebye et al., 2015). Risk perception varies among individuals and cultural contexts, making personalised safety strategies essential (Dickins et al., 2018). Structured emergency response systems, including protocols like the Silver Alert, enhance missing person recovery efforts while respecting individuals' rights (Gergerich & Davis, 2017). Park and Lee (2024) underscore the importance of safe wandering strategies, allowing PLWD to engage in independent mobility while minimising associated risks.

3.1.4. Technological safety solutions

Technology has significant potential in enhancing safety, yet its effectiveness depends on user-centred design and ethical considerations. Smart monitoring systems, including GPS tracking and fall detection, assist carers in ensuring safety (Gettel et al., 2021; Zou et al., 2022). However, acceptance of such technologies varies, with privacy concerns affecting their adoption (Wrede et al., 2023). Ensuring that technology aligns with the needs of both PLWD and their carers remains a critical challenge (Verloo et al., 2020).

3.1.5. Collaborative and multidisciplinary safety approaches

Ensuring safety in dementia care requires collaboration between formal healthcare providers, informal carers, and community stakeholders. A multidisciplinary approach improves safety management by integrating medical, social, and technological interventions (Behrman et al., 2017; Carlsson, 2022). Shared decision-making frameworks allow for ethical considerations while ensuring that PLWD maintain their dignity and independence (Smebye et al., 2015). Zhou, Thakkar, et al. (2024) highlights the necessity of engaging carers as active partners in fall prevention strategies, recognising their expertise in adapting environments and routines to reduce risk.

3.2. Housing

A growing body of research underscores the importance of housing in supporting PLWD to live independently and safely for as long as possible. Housing is not merely a physical space but a fundamental determinant of well-being, autonomy, and identity for PLWD. This synthesis highlights five overarching themes that emerge from contemporary research: safety and risk management, autonomy versus care dependency, the meaning of home and spatial experience, physical and social housing adaptations, and the role of technology in dementia-friendly environments. These themes illustrate the complex interplay between environmental factors, caregiving dynamics, and individual agency in sustaining quality of life for PLWD.

3.2.1. Safety and risk management

The home environment presents multiple risks for PLWD, including falls, medication mismanagement, and social isolation (Wang et al., 2020; Yin et al., 2023). Common household hazards such as inadequate lighting, slippery floors, and a lack of structural supports like handrails significantly heighten accident risk (Soilemezi et al., 2019). Additionally, the cognitive decline associated with dementia can impair spatial awareness and judgment, further exacerbating safety concerns. Carers play a pivotal role in mitigating these risks, emphasising the need for targeted carer education and home modifications that ensure a safe and adaptable living space (Yin et al., 2023). Addressing these hazards through proactive modifications not only reduces accidents but also enhances overall quality of life.

3.2.2. Autonomy versus care dependency

PLWD often experience a gradual loss of autonomy within their living environment, necessitating increasing levels of external support (Campbell et al., 2023; Fæø et al., 2019). Striking a balance between promoting independence and ensuring safety remains a challenge for carers (Campbell et al., 2023). The introduction of assistive technologies, such as contactless monitoring systems and smart home adaptations, offers potential solutions to maintain autonomy while safeguarding well-being. However, such innovations are not without controversy, as they raise ethical concerns related to privacy, consent, and the dignity of those being monitored (Wrede et al., 2023). Thoughtful implementation of supportive measures must respect individual preferences while ensuring necessary safeguards against harm.

3.2.3. The meaning of home and spatial experience

For PLWD, the home is more than just a place of residence; it is a deeply personal and meaningful space that embodies emotional, social, and existential dimensions (Fæø et al., 2019; Førsund et al., 2018). Dementia frequently leads to a contraction of lived space, wherein individuals become increasingly confined to familiar areas as their ability to navigate broad environments diminishes (Førsund et al., 2018). Maintaining a sense of familiarity and identity within this evolving context requires adaptive interventions that align with the individual's changing needs (Campbell et al., 2023). The home environment must be intentionally structured to preserve continuity, offering stability amid the cognitive decline.

3.2.4. Housing Adaptations: Design and support

Dementia-friendly housing requires deliberate environmental modifications that minimise cognitive overload and enhance wayfinding. The Home Environment Assessment for Cognition (HEAC) provides a structured framework for evaluating home suitability and identifying

necessary modifications (Wang et al., 2020). Thoughtful housing design, legible room sequences, sightlines to key spaces (e.g. toilet, exit), together with internal landmarks (contrasting doors, personalised signage, memory boxes) and access to private or shared green space (garden, balcony, courtyard) reduces cognitive load, supports orientation and improves well-being (Barrett et al., 2019; Soilemezi et al., 2019). In addition, broader policy considerations must ensure that dementia-friendly housing strategies address the needs of diverse populations, particularly older migrants who may encounter cultural and linguistic barriers in accessing suitable housing and care (Lipman & Manthorpe, 2017). A combination of physical and social interventions is essential to foster inclusivity and accessibility.

3.2.5. Technology and dementia-friendly environments

Smart home technologies and adaptive assistive devices hold promise for supporting PLWD in maintaining their independence and safety (Helal & Bull, 2019). Examples include automated lighting and night-path illumination; induction hobs or stove shut-off; door/bed sensors with agreed alerts; GPS (Global Positioning System) wearables or geofencing for missing-incident prevention; fall-detection and escalation; electronic medication dispensers with timed prompts; large-display calendar clocks and reminder systems; simple voice assistants for routine cues and help calls; and indoor wayfinding beacons. Nevertheless, the efficacy of these innovations depends on their ease of use, ethical implementation, and integration into daily life without compromising dignity or agency (Wrede et al., 2023). Future advancements must prioritise user-centred design principles that respect both autonomy and the evolving needs of PLWD.

3.3. Social participation

Social participation is a crucial determinant of well-being for PLWD. Dementia-friendly communities aim to create environments that foster engagement, reduce stigma, and enhance quality of life. This section synthesises key findings from recent studies on social participation among PLWD, highlighting community support mechanisms, barriers to participation, the role of social networks, individualized interventions, and the need for sustainable support systems.

3.3.1. Community support and engagement

Dementia-friendly initiatives play a pivotal role in enabling PLWD to remain active within their communities. Studies highlight that well-structured social activities — such as dementia cafes, arts programmes, and sports activities — promote mental stimulation and social well-being (Quinn et al., 2021; Thijssen et al., 2021). The presence of a caring, stimulating, and activating community fosters inclusion, ensuring that PLWD feel valued (Hung et al., 2021; Shannon et al., 2019). Public awareness campaigns and educational initiatives further support participation by reducing stigma and fostering empathy (Maki et al., 2020; Quinn et al., 2021).

3.3.2. Barriers to participation

Despite the benefits of social participation, PLWD encounter significant barriers. Stigma remains a major obstacle, often leading to withdrawal from community life (Chaudhury et al., 2021). Accessibility challenges, including inadequate transportation and inaccessible public spaces, further limit participation (Hicks et al., 2021; Shannon et al., 2019). Rural settings present unique difficulties, as geographical isolation and limited formal support structures increase reliance on informal networks (Clark et al., 2020; Hicks et al., 2021). Over time, many PLWD experience a progressive disengagement from community life due to physical and cognitive constraints, underscoring the need for adaptive interventions such as structured physical and social activities, spiritual practice, hobbies, cognitive stimulation, supported by practical aids (such as calendars, smartphones, planners) (Renn et al., 2021).

3.3.3. The role of social networks

Strong social networks, including family carers, community members, and local organisations, play a crucial role in sustaining participation (Innes et al., 2021). Family involvement in community-led initiatives ensures continuity of engagement and mitigates social isolation. Participatory approaches, where PLWD co-create community programmes, enhance their sense of agency and inclusion; examples include co-designed participatory arts sessions (singing, dance, visual arts, creative writing, comedy) and community initiatives co-designed with PLWD such as tailored artist home-visits and involvement in planning public and care environments (Alteren et al., 2023; Ward et al., 2021). The concept of “narrative citizenship” suggests that recognising the personal stories of PLWD strengthens resilience and reinforces their identity within the community (Clarke & Bailey, 2016).

3.3.4. Individualized and holistic approaches

A one-size-fits-all approach to dementia-friendly participation is ineffective. Instead, interventions should be personalised, acknowledging the diverse cognitive, emotional, and social needs of individuals (Huizenga et al., 2023). Programmes that integrate cognitive stimulation, social interaction, and physical activity yield better outcomes by addressing multiple aspects of well-being (Hung et al., 2021; Thijssen et al., 2021). Moreover, creating dementia-friendly environments requires a balance between familiarity and novelty, allowing individuals to navigate community spaces supporting independent travel to community activities, and manageable novelty expands opportunities to join new groups and places, maintaining out-of-home engagement while feeling safe and supported (Clarke & Bailey, 2016).

3.3.5. Sustainable and evolving support systems

Dementia-friendly initiatives require long-term investment and structural adaptation. Effective policy frameworks must integrate dementia-friendly principles into urban planning, healthcare services, and public awareness campaigns (Chaudhury et al., 2021; Maki et al., 2020; Quinn et al., 2021). Because dementia is progressive, support should adapt in type, intensity, and setting so participation remains possible, for example, shifting from independent to escorted travel, from large to small groups, or from community venues to home-based or digital offers (Shannon et al., 2019; Ward et al., 2021). Cross-sector collaborations and partnerships support social participation and the development of dementia-friendly initiatives, though limited resources threaten programme continuity (Shannon et al., 2019).

3.4. Respect and social inclusion

The social inclusion of PLWD is a fundamental component of dementia-friendly societies. Respect, dignity, and active participation in community life contribute to the well-being and quality of life of PLWD, yet many encounter significant barriers to inclusion. This section synthesises findings from 21 studies to highlight key themes in dementia inclusion, focusing on stigma reduction, community engagement, policy interventions, and environmental design. By examining these themes, this scoping review provides insight into the mechanisms that promote or hinder social inclusion for PLWD.

3.4.1. Stigma and misconceptions as barriers to inclusion

A recurring theme in the literature is the persistence of stigma and misconceptions surrounding dementia. Stigmatising attitudes often lead to social isolation, discrimination, and neglect (Aballa et al., 2024; Adebiyi et al., 2016; Nguyen, 2024). Cultural beliefs commonly attribute dementia to supernatural causes, aging, or personal weakness, reinforcing exclusion and limiting opportunities for engagement (Aihara et al., 2020; Musyimi et al., 2021). Furthermore, media representations and public discourse significantly shape perceptions, and positive framing can improve public attitudes and social acceptance (Bacsu et al., 2021; Nguyen, 2024). Addressing stigma through targeted educational

initiatives is essential for fostering dementia-friendly communities.

3.4.2. Community education and awareness initiatives

Community-led interventions play a crucial role in improving awareness and reducing stigma. Public education campaigns that are tailored to specific cultural and social contexts have proven effective in challenging stereotypes and misconceptions (Askari et al., 2018; Bacsu et al., 2021). Intergenerational programmes (regular activities that bring children and young people together with PLWD) and creative expression initiatives (e.g. singing, dance, visual arts, storytelling), have shown potential in improving social inclusion and fostering intergroup connections (Chalk & Page, 2016; Phinney et al., 2023). Additionally, virtual reality and immersive learning experiences contribute to a deeper understanding of dementia, particularly among primary and community care teams, community centres, libraries, and transport services, which improves everyday interactions and access to local activities (Wulan Sari et al., 2020).

3.4.3. Identity, agency, and lived experiences

The literature emphasises the active role of PLWD in shaping their social identities. Personal narratives, rituals, and familiar social roles help individuals maintain their sense of self and dignity despite cognitive decline (Birt et al., 2023; Clarke & Bailey, 2016). Encouraging self-expression and providing platforms for PLWD to share their lived experiences strengthens their sense of agency and promotes social inclusion (Motta-Ochoa et al., 2021). Furthermore, integrating the voices of PLWD into research and policy development ensures that their needs and preferences are recognised and reflected in dementia-friendly initiatives (Alteren et al., 2023).

3.4.4. Structural and policy-driven inclusion efforts

Sustained policy support is essential for fostering dementia-friendly societies. Public policies should prioritise dementia-friendly communities by integrating PLWD into decision-making processes and ensuring equitable access to care and services (Alteren et al., 2023; Parkinson et al., 2022). Addressing regional disparities is also crucial; while rural communities often provide strong social ties, they frequently lack essential dementia-related services and resources (Bacsu et al., 2019; Hicks et al., 2021). In contrast, urban settings offer better social infrastructure but may exhibit higher levels of stigma and exclusion (Forthal et al., 2019). Policy frameworks must account for these geographical disparities to provide inclusive and accessible dementia care across diverse settings.

3.4.5. Community and environmental design for inclusion

The built and social environments shape opportunities for social participation and the experience of respect among PLWD. Green spaces, dementia-friendly urban designs, and well-planned community settings promote engagement and well-being among PLWD (De Haas et al., 2021). Physical activity programmes tailored to cognitive abilities further enhance social participation and overall health (Hadley et al., 2024). By improving physical accessibility (barrier-free routes, clear wayfinding, predictable layouts) and inclusive social norms (staff training, welcoming cues), community spaces lower the threshold for joining activities and interacting with others, thereby reducing stigma and advancing social inclusion for PLWD and their carers.

3.5. Civic participation and employment

Civic participation and employment are fundamental to social inclusion and well-being. For PLWD, these opportunities are often constrained by stigma, workplace barriers, and limited policy support. A growing body of literature examines strategies to enhance PLWD engagement in work and civic life. This scoping review synthesises research on the facilitators and barriers to employment and civic participation for PLWD, identifying key themes across multiple studies and highlighting implications for policy and practice.

3.5.1. Social citizenship, stigma, and community inclusion

Stigma remains a major impediment to employment and civic engagement for PLWD (Haapala et al., 2019; Peoples et al., 2022). Traditionally, dementia has been viewed through a medicalised lens, reinforcing perceptions of dependency and limiting opportunities for active social participation (Peoples et al., 2022). However, recent studies call for a shift toward a social citizenship model, in which PLWD are recognised as individuals who participate in community and policy life, advocacy enacts this citizenship by building purpose, solidarity, freedom from stigma, and growth (Seetharaman & Chaudhury, 2020). Narrative citizenship refers to the recognised opportunity for PLWD to articulate their lived experiences, positioning themselves as insiders and negotiating belonging, which has been highlighted as a tool to challenge stigma and enhance inclusion (Clarke & Bailey, 2016).

The role of dementia-friendly communities in supporting PLWD employment and civic engagement is well-documented (Grogan et al., 2024; Heward et al., 2017). Community-driven initiatives that prioritise leadership roles for PLWD have demonstrated higher effectiveness in promoting meaningful participation (Grogan et al., 2024; Morton et al., 2021), for example inviting PLWD into advocacy and leadership roles, co-setting agendas, and co-facilitating activities within Dementia Friendly Community committees (Grogan et al., 2024), and adopting member-led decision-making, peer support, and opportunities to help others that build ownership and sustain engagement (Morton et al., 2021). However, employer engagement in such community initiatives and actions remains inconsistent, with many organisations lacking awareness of inclusive employment practices (Heward et al., 2017). Strengthening dementia-friendly employment models within broader community frameworks is necessary to improve long-term outcomes.

3.5.2. Workplace inclusion and employment retention

PLWD, particularly those diagnosed with young-onset dementia (YOD), encounter substantial workplace challenges. Many individuals choose to conceal symptoms due to fear of discrimination, which exacerbates job performance difficulties and contributes to premature job loss (Omote et al., 2023; Thomson et al., 2019). Studies indicate that tailored workplace accommodations, such as flexible schedules, task modifications, and employer education, can significantly improve job retention (Huizenga et al., 2023; Niedderer et al., 2023). Co-designed employment services—where PLWD collaborate in shaping workplace policies—have been found to enhance sustainability and engagement in the workforce (Niedderer et al., 2023), for example through co-created mentoring pathways, flexible non-stigmatising participation options, accessible plain-language materials with memory aids, carer-inclusive supports, or an integrated wellbeing-mentor role linking services.

3.5.3. Volunteering as a pathway to inclusion

Volunteering has emerged as an essential alternative to traditional employment for PLWD, providing a structured means of civic participation (Harding et al., 2024; Tournier et al., 2023). Programmes like DementTalent (linked to meeting centres, matching PLWD to community volunteer roles based on their talents and providing coaching with agreements at host organisations) enable individuals to engage in talent-based volunteering, allowing them to contribute based on their abilities rather than limitations (van Rijn et al., 2019). Structured day programmes incorporating volunteering opportunities have demonstrated benefits in improving well-being, reducing isolation, and fostering a sense of purpose (Lole et al., 2022).

3.5.4. Advocacy and empowerment

Engagement in advocacy efforts enhances agency and social inclusion for PLWD (Seetharaman & Chaudhury, 2020). By participating in policy discussions and decision-making processes, PLWD can influence systemic changes that affect their daily lives. However, challenges such

as tokenistic involvement and superficial consultation persist, limiting the effectiveness of advocacy initiatives (Seetharaman & Chaudhury, 2020). Narrative citizenship has been identified as a critical mechanism for legitimising PLWD perspectives and fostering a shift toward inclusive societal attitudes (Clarke & Bailey, 2016).

3.6. Communication and information

Effective communication and information provision play a crucial role in supporting PLWD and their carers. The reviewed studies highlight key themes related to information needs, trust in sources, empowerment, and knowledge dissemination

3.6.1. Information needs and access to reliable sources

One of the most significant challenges for dementia carers is accessing reliable, clear, and practical information regarding living with dementia. Carers frequently experience information overload and uncertainty about the credibility of health-related sources (Sbaffi, 2021). They often resort to personal filtering mechanisms, discarding information that does not align with their judgment or perceived safety concerns. However, this filtering can lead to missed opportunities for beneficial interventions (Sbaffi, 2021). Furthermore, fragmented communication and inconsistent information-sharing across primary care and specialty providers, community information-and-referral agencies (such as Alzheimer's Association chapters, Area Agencies on Aging), exacerbate carers' stress and hinder effective decision-making (Longstreth et al., 2022). Formalised knowledge management processes (for instance, explicit goals, roles, and standard procedures for acquiring, curating, disseminating, and evaluating information) within dementia care networks have been found to improve the accessibility and quality of information available to carers, bridging gaps between research, policy, and practice (Heinrich et al., 2016).

3.6.2. Empowerment and autonomy in communication

The reviewed studies emphasise the importance of empowering PLWD and their carers through improved communication strategies. Despite cognitive impairments, PLWD remain aware of their social interactions and can actively participate in meaningful communication when given the right support (Alsawy et al., 2020; Volkmer et al., 2023). Enabling PLWD to engage in conversations regarding clinical consultations, care-planning meetings, everyday family decisions, and service encounters, that respect their agency fosters a sense of value and inclusion (Volkmer et al., 2023). Similarly, carers who are equipped with appropriate resources and guidance are better positioned to manage their responsibilities and provide effective care (Longstreth et al., 2022). The development of structured referral services and targeted information interventions can help carers navigate the complexities of dementia care more effectively (Heinrich et al., 2016; Longstreth et al., 2022).

3.6.3. The role of empathy, relationships and regular contact

Empathy and relationship-building are central to effective dementia care communication. PLWD benefit from communication approaches that prioritise emotional validation rather than correction of memory errors (Alsawy et al., 2020). Empathetic listening and personalised interactions contribute to their well-being, reducing social isolation and increasing their sense of dignity (Alsawy et al., 2020; Volkmer et al., 2023). Similarly, carers' trust in health information is significantly enhanced when they have regular, personal interactions with the same healthcare professionals (Sbaffi, 2021). Conversely, impersonal or inconsistent communication can undermine carers' confidence in medical guidance and limit their ability to make informed decisions (Sbaffi, 2021).

3.6.4. Effective knowledge dissemination and support networks

Dementia care networks play an essential role in facilitating knowledge-sharing between carers, healthcare professionals, and community stakeholders. The presence of structured knowledge-sharing mechanisms significantly enhances collaboration and supports effective caregiving (Heinrich et al., 2016). Feedback from family carers and PLWD is a valuable tool in refining these networks, ensuring that information is relevant, accessible, and responsive to the needs of those providing care (Alteren et al., 2023; Heinrich et al., 2016). Holistic support approaches, which integrate formalised knowledge management with referral services, improve overall dementia care by making reliable resources more readily available (Longstreth et al., 2022).

3.7. Carer support

Informal carers play a crucial role in supporting home-dwelling PLWD, yet their needs are often overlooked in dementia care policies and interventions. Several key themes emerged from recent studies on informal carer support, highlighting social and emotional well-being, access to information and education, technology as a support tool, carer self-care, and financial and policy implications

3.7.1. Social and emotional support for carers

Social connections and emotional well-being are central to the carer experience. Carers often prioritise maintaining their social networks and participating in dementia-friendly communities, which enhance their well-being and caregiving resilience (Queluz et al., 2020; Silverman, 2021). Emotional stress, isolation, and burnout are common, particularly among spousal carers, who frequently experience exhaustion due to the long-term demands of dementia caregiving (Macdonald et al., 2020). Peer support networks have been shown to mitigate stress, providing a sense of solidarity and practical advice (Macdonald et al., 2020; Ploeg et al., 2020).

Community-based interventions that foster social inclusion improve both carer and PLWD experiences. Carers benefit from participating in dementia-friendly social events, where they receive informal support from others in similar situations (Quinn et al., 2021). However, many carers remain unaware of available resources, highlighting the need for improved outreach efforts (Quinn et al., 2021; Silverman, 2021). Policies should prioritise social engagement opportunities for carers to prevent isolation and improve overall well-being (Hall, 2022).

3.7.2. Access to information, education, and communication

A significant barrier to effective caregiving is the lack of accessible and structured information. Many carers report difficulties in finding reliable, stage-specific guidance on dementia progression, behavioural management, and available support services (Mahomed & Pretorius, 2024; Queluz et al., 2020). Informational deficits can lead to stress, uncertainty, and suboptimal care for PLWD. Training programmes have proven effective in equipping carers with essential skills to manage daily caregiving tasks (Bressan et al., 2020). Carers who receive structured education experience improved confidence and reduced anxiety when addressing behavioural symptoms in PLWD (Kerssens et al., 2015; Mahomed & Pretorius, 2024). However, communication barriers with healthcare professionals further complicate access to crucial information. Many carers struggle to navigate healthcare systems and feel that professional guidance is often insufficient or unclear (Mahomed & Pretorius, 2024). Healthcare professionals should provide carer-friendly information and establish clearer communication channels to enhance carer support.

3.7.3. Technology as a support tool for carers

Technological solutions have the potential to alleviate carer burden, improve monitoring of PLWD, and facilitate caregiving tasks. Studies highlight the benefits of assistive technologies such as GPS tracking, remote monitoring, and touchscreen-based interventions in enhancing carer confidence and reducing stress (Kerssens et al., 2015; van Boekel et al., 2020). Lifestyle monitoring systems allow carers to oversee the daily routines of PLWD remotely, providing reassurance and enabling

timely interventions (Zwierenberg et al., 2018).

Despite their potential, technological interventions face challenges in implementation. Some carers report usability difficulties, ethical concerns, and a lack of training on how to integrate assistive tools effectively (Sriram et al., 2019). Furthermore, technologies must balance personalisation with carer respite; while some interventions enhance engagement, they should not increase carer responsibilities (van Boekel et al., 2020). Co-designing technological solutions with carers can ensure that these tools are both practical and widely adopted (Sriram et al., 2019).

3.7.4. Carer well-being: Balancing responsibilities and self-care

The physical and mental health of carers is often compromised due to the demands of dementia caregiving. A lack of support for carers could ultimately pose a risk to the maintenance of agency in PLWD (Chung et al., 2017). Many carers however, neglect their own well-being, leading to stress, fatigue, and increased risk of chronic illness (Wang et al., 2019). Women, who make up the majority of dementia carers, experience disproportionate levels of stress due to societal expectations and norms (Kallitsis et al., 2019). Gender-sensitive policies and support programmes are needed to address these disparities.

Respite care is a critical but often underutilised service that allows carers to take breaks from their caregiving duties. Studies emphasise the importance of self-care and structured support to help carers maintain their own health and well-being (Hall, 2022; Ploeg et al., 2020). Without adequate respite, carers face a higher risk of burnout, which can negatively impact the quality of care they provide (Wang et al., 2019). Governments and healthcare systems should invest in flexible, carer-centred interventions to promote sustainable caregiving (Hall, 2022).

3.7.5. Financial and policy support for carers

Financial constraints are a significant challenge for dementia carers, particularly those who reduce their working hours or leave employment to provide full-time care. Many carers face economic hardships due to medical expenses, lost wages, and the hidden costs of caregiving (Cho & Kim, 2024; Hall, 2022). Financial stress is particularly pronounced among ethnic minority carers, such as Hispanic-American carers, who often lack access to formal support services and experience additional socioeconomic disadvantages (Sehar et al., 2022).

Policy interventions should include financial relief measures such as carer stipends, tax credits, and workplace flexibility programmes to support those balancing employment with caregiving responsibilities (Cho & Kim, 2024; Hall, 2022). Standardised carer burden assessment tools can help tailor financial aid to those most in need (Cho & Kim, 2024). Additionally, cultural adaptations of support services can improve engagement among diverse carer populations (Meyer et al., 2015; Sehar et al., 2022).

3.8. Community support and health services

Dementia care is a complex, multifaceted issue that extends beyond medical interventions to include social, technological, and policy-driven support. Findings from 21 studies were synthesises examining community support and health services for home-dwelling PLWD. The analysis identifies key themes related to barriers, carer roles, service fragmentation, and emerging solutions.

3.8.1. Barriers to accessing dementia care

A recurring issue across studies is the difficulty PLWD face in accessing community-based care. Geographic disparities are prominent, with individuals in rural areas encountering limited healthcare services and specialist support (Bilkey & Businge, 2024; Novek & Menec, 2022). Socioeconomic inequalities further exacerbate these challenges, as lower-income individuals experience delayed diagnoses and fewer care options (Giebel et al., 2024).

Cultural and linguistic barriers also play a role, particularly among ethnic minorities and immigrant communities. Zhong and Chiu (2023) highlights the “triple stigma” (age, dementia, ethnicity) that leads to social isolation and reduced healthcare access. Similarly, Epps et al. (2018) discusses how stigma and shame deter African-American older adults from seeking care, contributing to underutilisation of services.

A pervasive lack of public awareness and professional education about dementia further limits accessibility (Foley et al., 2017). Stigma remains a critical barrier, preventing early diagnosis and engagement with support systems (Boyle et al., 2022; Garrett et al., 2024). Additionally, healthcare navigation complexities create difficulties for PLWD and carers attempting to find appropriate services (Cotton et al., 2021; Portacolone et al., 2023).

3.8.2. Role of carers and social support

Family carers play a crucial role in dementia care, yet they often experience high levels of burden and difficulty navigating complex healthcare systems (Cotton et al., 2021; Bunn et al., 2016). Informal carers provide essential support, but inadequate resources and training contribute to carer strain (Parsons et al., 2024).

For kinless older adults—those without close family support—the situation is even more challenging. Taylor et al. (2023) found that kinless PLWD experience greater barriers to care and require alternative caregiving models, such as community-driven initiatives or non-family support networks. Without tailored interventions, socially isolated individuals face higher risks of unmet care needs and poorer health outcomes.

3.8.3. Gaps in service provision and systemic fragmentation

Several studies emphasise the fragmentation of dementia care services. Garrett et al. (2024) and Waymouth et al. (2023) describe how many communities lack structured dementia-friendly programmes, leaving PLWD and carers struggling to find necessary support. This issue is compounded by a reliance on general rather than specialised services, reducing the availability of tailored dementia care (Tabatabaei-Jafari et al., 2024). Furthermore, post-diagnostic support remains inconsistent, particularly in rural areas (Bilkey & Businge, 2024). Lack of coordination between healthcare providers and community services further complicates care continuity (Røsvik et al., 2020; Smith and Newbury, 2019).

3.8.4. Emerging solutions and innovations

Despite these challenges, research highlights promising innovations aimed at improving dementia care. Assistive and digital technologies offer new opportunities for enhancing independence and reducing carer burden (Wrede et al., 2022; Zamiri et al., 2021). These include remote monitoring tools, home-based interventions, and cognitive support systems.

Community-based initiatives, such as social prescribing and dementia-friendly policies, have also shown positive effects. Giebel et al. (2021) found that structured social engagement programmes improved well-being among PLWD. Similarly, public education campaigns and culturally competent awareness strategies can help combat stigma and enhance service uptake (Boyle et al., 2022).

3.9. Outdoor spaces and building

The built environment plays a crucial role in the well-being and independence PLWD. Recent research has emphasised the need for dementia-friendly design in both urban and residential settings to promote navigation, cognitive function, and social inclusion. This synthesis presents key findings from eight studies that explore the intersection of environmental design, urban planning, and dementia-friendly policies.

3.9.1. Environmental design for well-being, navigation, and wayfinding

A well-designed environment can significantly enhance the quality of life for PLWD by addressing key sensory and spatial needs. Attaianese

and Barilà (2023) highlights the role of lighting, acoustics, and air quality in promoting mental well-being. Natural lighting is preferred over artificial alternatives due to its positive effects on circadian rhythms and psychological comfort, while minimising background noise and ensuring good indoor air quality further reduce cognitive stress.

Wayfinding and spatial navigation challenges are well-documented barriers for PLWD (Seetharaman et al., 2021; Biglieri & Dean, 2024). Studies indicate that the presence of salient landmarks—distinguished by colour, shape, and personal meaning—can improve spatial awareness and navigation. Fleming et al. (2017) also stress the importance of clear signage, simple building layouts, and sensory-friendly environments to mitigate confusion and enhance autonomy.

3.9.2. *Dementia-friendly urban planning and infrastructure*

Inclusive urban planning is essential in creating environments that foster mobility and community participation. Research by Nouri and Chaudhury (2025, 2025b) and Pozo Menéndez and Higueras García (2022) suggests that urban spaces should incorporate accessible pedestrian pathways, noise reduction strategies, and seating areas to accommodate PLWD. Biglieri and Dean (2024) emphasise the need for integrating dementia-friendly wayfinding strategies within public spaces, noting that individuals in suburban environments experience both barriers and enabling factors related to mobility and independence. Nouri and Chaudhury (2025b) also advocates for evidence-based urban planning, emphasising the role of participatory research in ensuring that city infrastructure aligns with the lived experiences of PLWD. Their findings suggest that municipal planners should integrate dementia-friendly principles into city development to enhance accessibility and reduce stigma, thereby fostering greater social inclusion.

3.9.3. *The role of green spaces in social inclusion and cognitive function*

Urban green spaces (UGS) contribute to cognitive and social well-being, yet accessibility remains a challenge. De Haas et al. (2021) identify green spaces as important sites for social interaction and cognitive stimulation, but highlight disparities in access due to physical and societal barriers. The study underscores the need for better cooperation between public and private sectors to integrate green spaces into dementia-friendly urban planning. Green spaces should be designed with clear pathways, frequent seating, and natural wayfinding cues to maximise their usability for PLWD. Fleming et al. (2017) also suggest that incorporating sensory gardens into residential and community environments can provide therapeutic benefits, reinforcing the importance of nature in dementia-friendly planning.

3.9.4. *Public awareness, policy, and standardised design guidelines*

Increasing public awareness and establishing standardised guidelines are critical for advancing dementia-friendly environments. Sturge et al. (2021) highlight the role of education and policy advocacy in reducing stigma and fostering community understanding. Public awareness campaigns can encourage inclusive attitudes toward PLWD, while policy reforms can mandate accessibility requirements in new developments. A major gap identified in the literature is the lack of standardised dementia-friendly design guidelines (Fleming et al., 2017; Pozo Menéndez & Higueras García, 2022). These studies argue for the adoption of uniform principles that can be applied across different settings, ensuring that dementia-friendly design is not limited to isolated initiatives but becomes an integrated aspect of urban and architectural planning.

3.10. *Transportation*

Transportation is essential for maintaining independence, social participation, and access to essential services for PLWD. However, cognitive decline presents unique challenges in navigating traditional transport systems, limiting mobility and increasing reliance on carers (Lanthier-Labonté et al., 2024). Despite the growing emphasis on dementia-friendly communities, research on accessible and inclusive transportation remains limited (Lanthier-Labonté et al., 2024; Nemec & Girling, 2023). Lanthier-Labonté et al. (2024) is the most recent study, were she identified five key dimensions of dementia-friendly transportation—availability, accessibility, acceptability, adaptability, and affordability—to explore current challenges and potential solutions.

3.10.1. *Dementia-friendly transportation*

Transportation underpins independence, social participation, and access to services for PLWD yet the evidence base is still emerging. A recent scoping review highlights persistent gaps—especially around cognitive accessibility—and points to service features that matter for users (Lanthier-Labonté et al., 2024). Empirical work shows that unpredictability in public transport and living alone reduce access; digital interfaces, timetable complexity, and on-the-spot decisions can be hard to manage; stigma and worries about autonomy shape choices (Nemec & Girling, 2023). In response, structured training and digital wayfinding tools can build skills and confidence for using public transit—for example, Personal Navigation for Individuals with Disabilities (PNID) and the WayFinder app—and assistive technologies can provide step-by-step, real-time support (Asghar et al., 2019; Culter Harris et al., 2024). Services also need to adapt over time, balancing independence and safety during driving cessation; staff training in dementia awareness improves user experience and acceptance (Culter Harris et al., 2024; Lanthier-Labonté et al., 2024). Finally, cost remains a barrier, particularly in rural and low-income settings: ridesharing may be reliable but expensive, public transit is more affordable yet often hard to use; policy measures and public funding for dementia-friendly transport and training, alongside cost-effective assistive technologies, can widen equitable access (Asghar et al., 2019; Culter Harris et al., 2024; Lanthier-Labonté et al., 2024; Nemec & Girling, 2023).

4. Discussion

While the WHO's ten domains provide a valuable and comprehensive framework for dementia-friendly societies, the findings of this study suggest that further operationalisation is needed to translate these domains into actionable strategies (World Health Organization, 2021). Results validate the crucial role of both social and physical environments domains as mentioned by the WHO in shaping the inclusivity and support available to PLWD, ultimately influencing their overall quality of life (Craig et al., 2024).The WHO report thereby serves as an important starting point, offering a structured way of thinking about dementia- friendly communities, but it does not provide detailed definitions or implementation guidelines. This review builds upon this foundation by exploring how the domains are currently understood in the literature and identifying key areas where additional refinement and empirical grounding can enhance their applicability (World Health Organization, 2021).

One important insight is the strong interdependence between social and physical environments, which the WHO presents separately. The physical environment—encompassing housing, transportation, outdoor spaces, and infrastructure—emerges as a foundational determinant of mobility, safety, and autonomy. However, its effectiveness is largely mediated by social factors such as stigma, carer support, and opportunities for civic and social participation (Craig et al., 2024). For example, while the WHO highlights the need for safe public spaces and housing, the findings of this study emphasise that true safety extends beyond infrastructure to include social factors such as community awareness, carer involvement, and balancing autonomy with risk management. Similarly, whereas the WHO frames housing as a matter of accessibility and affordability, the synthesis of this studyunderscores the importance of autonomy, personalisation, and the emotional significance of home environments in maintaining identity and well-being. The interdependence is also evident in transportation, where physical accessibility alone does not guarantee inclusivity without corresponding social

adaptations, such as dementia-aware communities and supportive service networks. Moreover, while safety measures and assistive technologies can enhance independence, they must be implemented alongside social initiatives that foster respect, inclusion, and meaningful engagement to prevent isolation and loss of agency. Taken together, these findings highlight that dementia inclusivity cannot be achieved solely through environmental modifications but requires a holistic, integrated approach that aligns physical design with social and policy-driven interventions. To address this, dementia-friendly community research and practice could be advanced by explicitly adopting relational models (such as ethics of care, eco-social model, social-ecological systems thinking), which integrate physical and social domains, clarify co-produced mechanisms, and yield integrated indicators that couple physical design metrics with social participation and respect (Krieger, 2001; Stokols, 1992; Tronto, 2020).

4.1. Further development of key domains

Beyond these expansions, this review findings also suggest ways in which certain domains could be further developed. For example, carer support, communication and information, and transportation could benefit from greater attention to cognitive accessibility, trust in information sources, and the role of assistive technologies. While the WHO framework acknowledges the need for carer support, findings in this review highlight the importance of respite care, financial relief, and emotional well-being—factors that significantly shape both the experience of caregiving and the quality of life of PLWD. Similarly, while the WHO underscores the need for accessible information, this review identifies challenges related to misinformation, fragmented communication, and the necessity of structured knowledge-sharing networks. In the transportation domain, the WHO primarily emphasises physical accessibility, whereas findings in this review highlight the need for dementia-awareness training for transport personnel, assistive navigation technologies, and cognitive-friendly transport design. Taken together, this review findings do not seek to replace the WHO framework but rather build upon it by providing empirical insights that can support the further refinement and implementation of dementia-friendly policies and practices (Buckner et al., 2022). By expanding upon this initial foundation, the study contribute to a deeper understanding of how dementia inclusivity can be effectively integrated into urban planning, healthcare, and community initiatives (Buckner et al., 2022).

4.2. Methodological considerations and limitations

This scoping review is the first to systematically operationalise the WHO's ten domains for dementia-friendly societies, offering insights that extend across multiple disciplines, including urban planning, public health, social sciences, and policy development. By mapping existing research, the study provides a foundation for improved interdisciplinary collaboration, ensuring that dementia- friendly environments are shaped by both social and physical factors. Additionally, the framework may serve as a model for other underserved groups, such as older adults without carers or individuals with cognitive disabilities, who also require inclusive environments.

A key methodological strength of this review is the additional linguistic search, which proved valuable in identifying relevant studies that might have been overlooked in conventional database searches. However, despite its clear potential, linguistic search lacks full transparency, making it difficult to ensure reproducibility—a key requirement in literature reviews. Therefore it is in its current format advised to use AI tools supplementary, not substitutive. As AI-driven search strategies continue to evolve, it is encouraged to further refine the PRISMA guidelines to better integrate such technologies while maintaining methodological rigour.

Another methodological consideration is the decision to focus on studies published in the past ten years. While this approach ensures that the review captures recent developments, it may have excluded relevant older studies. However, by incorporating major systematic reviews and foundational papers through citation tracking and snowballing methods, the risk of missing key insights was mitigated. Additionally, a level of saturation in the included literature was observed, suggesting that the most relevant themes were well-covered within the timeframe. Nevertheless, future research could explore whether expanding the time window would yield additional perspectives, particularly in domains where literature is currently scarce.

Finally, while three major databases were used, supplemented by linguistic search and citation tracking, grey literature or non-English studies were not systematically included. This may have introduced bias toward academic publications from higher-income countries. Despite these limitations, the findings offer a strong empirical foundation for advancing dementia-friendly societies, emphasising the need for greater interdisciplinary collaboration and an integrated approach that aligns urban design, healthcare, and policy initiatives.

4.3. Implications for practice and future research

Our findings offer several important implications for both practice and future research in developing dementia- friendly societies. First, the operationalisation of the WHO's ten domains highlights the interdependence of social and physical environments, reinforcing the need for integrated policy approaches. Practitioners—including urban planners, healthcare providers, and community organisations—should work collaboratively to ensure that environmental adaptations, such as accessible housing and transportation, are complemented by social initiatives that foster inclusion, reduce stigma, and support carers (See Table 1 for Key operational elements for each WHO domain).

Second, while some domains, such as community support and health services, have well-established evidence bases, others, including communication and information and transportation, require further investigation. Research should explore how to enhance cognitive accessibility in public services, develop effective dementia-friendly training for key stakeholders (for instance, transport staff, employers, and community workers), and improve the availability of clear, trustworthy information for PLWD and their carers.

Third, technology has emerged as a critical enabler across all domains, despite not being explicitly included in the WHO framework (Marston & Van Hoof, 2019). Future studies should examine how assistive technologies, smart environments, and digital tools can be effectively integrated into dementia-friendly planning and healthcare, ensuring ethical considerations such as privacy and autonomy are respected (Schneider et al., 2024). Recent reviews by Abdulazeem et al. (2025) and Borges do Nascimento et al. (2025) on digital health technologies and telehealth in dementia care summarises the outcomes of related interventions, and provides a clear connection to the ten dementia- friendly domains as outlined by the WHO.

Finally, greater geographic diversity in research is needed, as much of the existing literature focuses on high-income, Western contexts. Research on dementia-friendly environments in Africa and other lower-income regions remains scarce, making it difficult to assess whether the operationalisations identified in this review apply (at all) to these contexts. Future studies should investigate how dementia-friendly principles apply in diverse cultural, economic, and infrastructural settings, ensuring that proposed frameworks and interventions are globally relevant. Strengthening the evidence base in these areas will be crucial for ensuring that dementia-friendly policies and practices are truly applicable across different community settings.

5. Conclusion

This scoping review operationalised the WHO's ten domains for dementia-friendly societies, emphasising the interdependence between physical and social environments in shaping the quality of life for PLWD.

Table 1
Operational elements for each WHO domain.

WHO Domain for Dementia-friendly societies	Key operational elements
Safety	• Balance autonomy and protection: fall prevention, clear wayfinding and safe transport. • Safeguarding: carer and community networks; protocols for financial harm and neglect. • Risk management: emergency response, missing-person procedures and safe-wandering plans. • Assistive/monitoring technologies used with consent and privacy-by-design.
Housing	• Home modifications: lighting, contrast, slip resistance and grab rails to reduce falls. • Preserve familiarity and identity: consistent layouts, personal items, shared social spaces. • Clear wayfinding and zoning to minimise cognitive load while respecting privacy. • Co-designed assistive/smart technologies with ethical data and privacy safeguards. • Use structured home assessments (e.g., HEAC) and plan for staged adaptation over time.
Social participation	• Inclusive, accessible venues; walkable areas and transport that enable participation. • Structured offers (cafés, arts, sport, volunteering) co-designed with PLWD. • Support networks of family, carers and community organisations to sustain engagement. • Tackle barriers: stigma, cost, logistics and scheduling; use flexible, low-demand formats. • Adapt supports as needs change; embed commitments in local planning and funding.
Respect and social inclusion	• Anti-stigma education, intergenerational programmes and positive public narratives. • Include PLWD in decision-making and co-design. • Make public spaces inclusive: accessible routes, clear wayfinding and familiar landmarks. • Train community members and staff in inclusive communication. • Ensure equitable access to services, including rural outreach and quality green spaces.
Civic participation and employment	• Employer education and reasonable adjustments: flexible schedules, task redesign, supported employment. • Structured pathways for volunteering and civic roles; disclosure support and anti-discrimination safeguards. • Co-design workplace and civic programmes with PLWD; involve them in decision-making. • Public awareness and narrative citizenship to counter stigma; use legal and policy levers to enforce inclusion. • Advice and navigation for benefits and work transitions; income protection and advocacy training.
Communication and information	• Plain-language, accessible materials (easy-read, pictograms) delivered across channels. • Named contact and continuity; person-centred communication (validation, active listening). • Structured navigation: single point of access, clear signposting and care coordination. • Stage-specific information with timely updates; manage load to avoid overwhelm. • Knowledge-sharing networks for carers and professionals; feedback loops and digital inclusion support.
Carer support	• Peer support, community programmes and respite to reduce isolation and burden. • Stage-specific education, skills training and clear care navigation. • Co-designed technologies that are usable, reduce workload and respect privacy. • Financial and workplace supports: allowances, flexible work and tax relief. • Routine assessment and wellbeing offers (e.g., counselling, respite) embedded in care plans.
Community support and health services	• Integrated, coordinated care pathways with named coordinators to reduce fragmentation. • Equitable access across rural/remote and socio-economic groups; culturally competent services with interpreter support. • Comprehensive carer support: stage-specific training, respite and peer networks. • Appropriate technology (telehealth, remote monitoring, social engagement tools) to enhance efficiency, not replace care. • Policy and financing that enable community-driven models through cross-sector collaboration and sustainable investment.
Outdoor spaces and buildings	• Legible wayfinding: clear signage, distinctive landmarks, simple spatial layouts. • Sensory-friendly design: natural lighting, low noise, good air quality. • Inclusive access: step-free routes, seating, toilets, accessible paths and green spaces. • Therapeutic features: sensory gardens and structured outdoor areas to support engagement. • Standards and governance: adopt dementia-friendly design guidelines; embed via policy and cross-sector collaboration.
Transportation	• Ensure the five A's: availability, accessibility, acceptability, adaptability, affordability. • Provide reliable services, readable timetables, simple booking and step-by-step guidance; integrate assistive technologies and travel training. • Train transport staff in dementia awareness and mobilise community support networks. • Plan transitions from independent to assisted travel with customisable AT and structured mobility programmes. • Use subsidies and public investment; embed dementia-friendly principles via policy, planning and cross-sector collaboration.

While community support and health services are well-researched, domains like communication, information, and transportation require further development, particularly in cognitive accessibility and dementia-aware public services.

Technology emerged as a key enabler across all domains yet remains absent from the WHO framework. Future research should explore its role in assistive navigation, communication, and smart environments, while addressing ethical concerns. Additionally, geographic gaps persist, with most studies originating from high-income countries. Expanding research in low- and middle-income regions is essential for globally relevant dementia-friendly policies.

Dementia-friendly societies require more than good intentions—they demand evidence-based action, interdisciplinary collaboration, and policies that translate inclusivity into lived reality.

CRediT authorship contribution statement

L. Verdoes: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **J. Dikken:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **J. van Hoof:** Writing – review & editing, Writing – original draft, Supervision, Project administration, Funding acquisition, Conceptualization.

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Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.cities.2026.106886.

Data availability

No data was used for the research described in the article.

References

Aballa, A., Khakali, L., Njoroge, W., Kamau, L. W., Merali, Z., & Bosire, E. N. (2024). "They are perceived to be witches, and some are killed": Community perceptions of elderly people living with dementia in Kilifi, Kenya. *Journal of Alzheimer's Disease*. https://doi.org/10.1177/13872877241303931. Advance online publication.

Abdulazeem, H. M., Borges do Nascimento, I. J., Weerasekara, I., Sharifan, A., Grandi Bianco, V., Cunningham, C., … Novillo-Ortiz, D. (2025). Utilization of digital health technologies (DHTs) for dementia care: Bibliometric analysis and systematic report. *JMIR Mental Health, 12*, Article e64445. https://doi.org/10.2196/64445

Adebiyi, A. O., Fagbola, M. A., Olakehinde, O., & Ogunniyi, A. (2016). Enacted and implied stigma for dementia in a community in south-West Nigeria. *Psychogeriatrics, 16*(4), 268–273. https://doi.org/10.1111/psyg.12156

Aihara, Y., Kato, H., Sugiyama, T., Ishi, K., & Goto, Y. (2020). Public attitudes towards people living with dementia: A cross-sectional study in urban Japan (innovative practice). *Dementia (London), 19*(2), 438–446. https://doi.org/10.1177/1471301216682118

Alsawy, S., Tai, S., McEvoy, P., & Mansell, W. (2020). "it's nice to think somebody's listening to me instead of saying 'oh shut up'": People with dementia reflect on what makes communication good and meaningful. *Journal of Psychiatric and Mental Health Nursing, 27*(2), 151–161. https://doi.org/10.1111/jpm.12559

Alteren, J., Johannessen, A., Lyberg, A. M., & Magnussen, I.-L. (2023). Giving voice to people with dementia and perspectives regarding a dementia-friendly society: A synthesis of qualitative studies. *Journal of Multidisciplinary Healthcare, 16*, 851–861. https://doi.org/10.2147/JMDH.S398570

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Asghar, I., Cang, S., & Yu, H. (2019). An empirical study on assistive technology-supported travel and tourism for people with dementia. *Disability and Rehabilitation. Assistive Technology, 15*(8), 933–944. https://doi.org/10.1080/17483107.2019.1629119

Askari, N., Bilbrey, A. C., Garcia Ruiz, I., Humber, M. B., & Gallagher-Thompson, D. (2018). Dementia awareness campaign in the Latino community: A novel community engagement pilot training program with promotoras. *Clinical Gerontologist, 41*(3), 200–208. https://doi.org/10.1080/07317115.2017.1398799

Attaianese, E., & Barilà, M. (2023). *Inclusive mental well-being through environmental design. In E3S web of conferences (Vol. Vol. 436, p. 06005)*. EDP Sciences. https://doi.org/10.1051/e3sconf/202343606005

Bacsu, J., Novik, N., Johnson, S., Viger, M., McIntosh, T., Jeffery, B., Muhajarine, N., & Hackett, P. (2019). Addressing the needs of rural and remote people in a national dementia strategy for Canada. *Canadian Journal of Public Health, 110*(6), 752–755. https://doi.org/10.17269/s41997-019-00241-0

Bacsu, J.-D., Johnson, S., O'Connell, M. E., Viger, M., Muhajarine, N., Hackett, P., … McIntosh, T. (2021). Stigma reduction interventions for dementia: A scoping review. *Canadian Journal on Aging, 41*(2), 203–213. https://doi.org/10.1017/S0714980821000192

Barrett, P., Sharma, M., & Zeisel, J. (2019). Optimal spaces for those living with dementia: Principles and evidence. *Building Research and Information, 47*(6), 734–746. https://doi.org/10.1080/09613218.2018.1489473

Behrman, S., Wilkinson, P., Lloyd, H., & Vincent, C. (2017). Patient safety in community dementia services: What can we learn from the experiences of caregivers and healthcare professionals? *Age and Ageing, 46*(3), 518–521. https://doi.org/10.1093/ageing/afw220

Biglieri, S., & Dean, J. (2024). Fostering mobility for people living with dementia in suburban neighborhoods through land use, urban design and wayfinding. *Journal of Planning Education and Research, 44*(3), 1704–1718. https://doi.org/10.1177/0739456X221113796

Bilkey, D., & Businge, E. (2024). Dementia post-diagnostic support in UK rural communities: Experiences of people living with dementia, informal caregivers, and healthcare professionals. *BJPsych Open.*. https://doi.org/10.1192/bjo.2024.117

Birt, L., Charlesworth, G., Moniz-Cook, E., Leung, P., Higgs, P., Orrell, M., & Poland, F. (2023). "the dynamic nature of being a person": An ethnographic study of people living with dementia in their communities. *The Gerontologist, 63*(8), 1320–1329. https://doi.org/10.1093/geront/gnad022

Boekel, L. V., Wouters, E. J. M., Grimberg, B. M., Boumans, J., Meer, N. J. M. V., & Luijkx, K. G. (2020). Perspectieven van stakeholders over het gebruik van technologie in de zorg voor thuiswonende ouderen met dementie [perspectives of stakeholders on technology use in the care of community-living older adults with dementia]. *Tijdschrift voor Gerontologie en Geriatrie, 51*(3). https://doi.org/10.36613/tgg.1875-6832/2020.03.03

Borges do Nascimento, I. J., Abdulazeem, H. M., Weerasekara, I., Sharifan, A., Grandi Bianco, V., Kularathne, I., … Novillo-Ortiz, D. (2025). An overview of reviews on telemedicine and telehealth in dementia care: Evidence across clinical, psychological, behavioral, social, and economic domains. *JMIR Mental Health, 12*, Article e75266. https://doi.org/10.2196/75266

Boyle, L. D., Husebø, B. S., & Vislapuu, M. (2022). Promoters and barriers to the implementation and adoption of assistive technology and telecare for people with dementia and their caregivers: A systematic review of the literature. *BMC Health Services Research, 22*(1), 1573. https://doi.org/10.1186/s12913-022-08968-2

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bressan, V., Visintini, C., & Palese, A. (2020). What do family caregivers of people with dementia need? A mixed-method systematic review. *Health & Social Care in the Community, 28*, 1942–1960. https://doi.org/10.1111/hsc.13048

Buckner, S., Lafortune, L., Darlington, N., et al. (2022). A suite of evaluation resources for dementia friendly communities: Development and guidance for use. *Dementia (London)., 21*(8), 2381–2401. https://doi.org/10.1177/14713012221106634

Bunn, F., Goodman, C., Pinkney, E., & Drennan, V. M. (2016). Specialist nursing and community support for the carers of people with dementia living at home: An evidence synthesis. *Health & Social Care in the Community, 24*(1), 48–67. https://doi.org/10.1111/hsc.12189

Campbell, S., Clark, A., Keady, J., Manji, K., Odzakovic, E., Rummery, K., & Ward, R. (2023). "I can see what's going on without being nosey..." what matters to people living with dementia about home as revealed through visual home tours. *International Journal of Geriatric Psychiatry, 38*(9), 1–12. https://doi.org/10.1002/gps.5999

Carlsson, C. M. (2022). Management of dementia. *Continuum (Minneapolis, Minn.) (Minneap Minn), 28*(3), 885–900. https://doi.org/10.1212/CON.0000000000001132

Cataldi, R., Chowdhary, N., Seeher, K., Moorthy, V., & Dua, T. (2022). A blueprint for the worldwide research response to dementia. *The Lancet Neurology, 21*(8), 690–691.

Chalk, A., & Page, S. (2016). Dementia RED (respect empathy dignity): Collaborating to build dementia-supportive communities in North Wales—Reporting on a pilot project (innovative practice). *Dementia (London), 15*(2), 257–262. https://doi.org/10.1177/1471301214563203

Chaudhury, H., Mahal, T., Seetharaman, K., & Nygaard, H. B. (2021). Community participation in activities and places among older adults with and without dementia. *Dementia (London), 20*(4), 1213–1233. https://doi.org/10.1177/1471301220927230

Cho, M., & Kim, O. (2024). Development and validation of the dementia caregiver burden scale: A tool for community-dwelling dementia caregivers. *Journal of Nursing Research, 32*(4), Article e337. https://doi.org/10.1097/jnr.0000000000000625

Chung, P. Y. F., Ellis-Hill, C., & Coleman, P. (2017). Supporting activity engagement by family carers at home: Maintenance of agency and personhood in dementia. *International Journal of Qualitative Studies on Health and Well-Being, 12*(1), Article N. PAG. https://doi.org/10.1080/17482631.2016.1267316

Clark, A., Campbell, S., Keady, J., Kullberg, A., Manji, K., Rummery, K., & Ward, R. (2020). Neighbourhoods as relational places for people living with dementia. *Social Science & Medicine, 252*, Article 112927. https://doi.org/10.1016/j.socscimed.2020.112927

Clarke, C., & Bailey, C. (2016). Narrative citizenship, resilience and inclusion with dementia: On the inside or on the outside of physical and social places. *Dementia, 15*(3), 434–452. https://doi.org/10.1177/1471301216639736

Cooper, J., Burrow, S., & Pusey, H. (2021). What are the perceptions of people living with dementia, family carers, professionals and other potential stakeholders to the use of global positioning systems to promote safer outdoor walking? A qualitative literature review. *Disability and Rehabilitation: Assistive Technology, 16*(6), 614–623. https://doi.org/10.1080/17483107.2019.1686074

Cotton, Q. D., Kind, A. J. H., Kim, A. J., Block, L. M., Thyrian, J. R., Monsees, J., … Gilmore-Bykovskyi, A. (2021). Dementia caregivers' experiences engaging supportive services while residing in under-resourced areas. *Journal of Alzheimer's Disease, 84*(1), 169–177. https://doi.org/10.3233/JAD-210609

Craig, S., Halloran, P. O., Mitchell, G., Stark, P., & Wilson, C. B. (2024). Dementia friendly communities (DFCs) to improve quality of life for people with dementia: A realist review. *BMC Geriatrics, 24*(1), 776. https://doi.org/10.1186/s12877-024-05343-0

Culter Harris, K., Frick Semmler, B. J., Anderson, S., Mance, E., Stojkov, A., Metzler, S., & DiGiovine, C. P. (2024). Innovative solutions to support individuals with disabilities accessing public transportation: A case study. *Assistive Technology, 36*(4), 285–294.

de Haas, W., Hassink, J., & Stuiver, M. (2021). The role of urban green space in promoting inclusion: Experiences from the Netherlands. *Frontiers in Environmental Science, 9*, Article 618198. https://doi.org/10.3389/fenvs.2021.618198

Dickins, M., Goeman, D., O'Keefe, F., Iliffe, S., & Pond, D. (2018). Understanding the conceptualisation of risk in the context of community dementia care. *Social Science & Medicine, 208*, 72–79. https://doi.org/10.1016/j.socscimed.2018.05.018

Dikken, J., van den Hoven, R. F. M., van Staalduinen, W. H., Hulsebosch-Janssen, L. M. T., & van Hoof, J. (2020). How older people experience the age-friendliness of their City: Development of the age-friendly cities and communities questionnaire. *International Journal of Environmental Research and Public Health, 17*(18), 6867. https://doi.org/10.3390/ijerph17186867

Epps, F., Weeks, G., Graham, E., & Luster, D. (2018). Challenges to aging in place for African American older adults living with dementia and their families. *Geriatric Nursing, 39*(6), 646–652. https://doi.org/10.1016/j.gerinurse.2018.04.018

Fæø, S. E., Husebø, B. S., Bruvik, F. K., & Tranvåg, O. (2019). "we live as good a life as we can, in the situation we're in" – The significance of the home as perceived by persons with dementia. *BMC Geriatrics, 19*(1), 158. https://doi.org/10.1186/s12877-019-1171-6

Fleming, R., Bennett, K., Preece, T., & Phillipson, L. (2017). The development and testing of the dementia friendly communities environment assessment tool (DFC EAT). *International Psychogeriatrics, 29*(2), 303–311. https://doi.org/10.1017/S1041610216001678

Foley, T., Boyle, S., Jennings, A., & Smithson, W. H. (2017). "We're certainly not in our comfort zone": A qualitative study of GPs' dementia-care educational needs. *BMC Family Practice, 18*, 1–10. https://doi.org/10.1186/s12875-017-0639-8

Førsund, L. H., Grov, E. K., Helvik, A.-S., Juvet, L. K., Skovdahl, K., & Eriksen, S. (2018). The experience of lived space in persons with dementia: A systematic meta-synthesis. *BMC Geriatrics, 18*, 33. https://doi.org/10.1186/s12877-018-0728-0

Forthal, S., Fekadu, A., Medhin, G., Selamu, M., Thornicroft, G., & Hanlon, C. (2019). Rural vs urban residence and experience of discrimination among people with severe mental illnesses in Ethiopia. *BMC Psychiatry, 19*(1). https://doi.org/10.1186/s12888-019-2345-7

Garrett, M. H., Azar, D., Goeman, D., Thomas, M., Craig, E. A., & Maybery, D. (2024). Health and social care needs of people living with dementia: A qualitative study of dementia support in the Victorian region of Gippsland, Australia. *Rural and Remote Health, 24*, Article 8244. https://doi.org/10.22605/RRH8244

Gergerich, E., & Davis, L. (2017). Silver alerts: A notification system for communities with missing adults. *Journal of Gerontological Social Work, 60*(3), 232–244. https://doi.org/10.1080/01634372.2017.1293757

Gettel, C. J., Chen, K., & Goldberg, E. M. (2021). Dementia care, fall detection, and ambient-assisted living technologies help older adults age in place: A scoping review. *Journal of Applied Gerontology, 40*(12), 1893–1902. https://doi.org/10.1177/07334648211005868

Giebel, C., Hanna, K., Watson, J., Faulkner, T., O'Connell, L., Smith, S., & Donnellan, W. J. (2024). A systematic review on inequalities in accessing and using community-based social care in dementia. *International Psychogeriatrics, 36*(7), 540–563. https://doi.org/10.1017/S104161022300042X

Giebel, C., Morley, N., & Komuravelli, A. (2021). A socially prescribed community service for people living with dementia and family carers and its long-term effects on well-being. *Health & Social Care in the Community, 29*(6), 1852–1857. https://doi.org/10.1111/hsc.13297

Grogan, C., Stafford, L., Miller, E., & Burton, J. (2024). Dementia-friendly communities: Micro-processes and practices observed locally in Queensland, Australia. *Journal of Aging Studies, 69*, Article 101235. https://doi.org/10.1016/j.jaging.2024.101235

Haapala, I., Carr, A., & Biggs, S. (2019). What you say and what I want: Priorities for public health campaigning and initiatives in relation to dementia. *Australasian Journal on Ageing, 38*(Suppl. 2), 59–67. https://doi.org/10.1111/ajag.12647

Hadley, R., Mathie, E., Pike, E., & Goodman, C. (2024). Physical activity inclusion in dementia-friendly communities: A mixed methods study. *Journal of Aging and Physical Activity, 32*(3), 376–386. https://doi.org/10.1123/japa.2022-0371

Haikio, K., Sagbakken, M., & Rugkasa, J. (2019). Dementia and patient safety in the community: A qualitative study of family carers' protective practices and implications for services. *BMC Health Services Research, 19*(1). https://doi.org/10.1186/s12913-019-4478-2

Hall, K. (2022). Caregivers to older adults require support: A scoping review of their priorities. *Journal of Aging Studies, 36*(7), 140–153. https://doi.org/10.1111/hsc.14071

Harding, E., Sullivan, M. P., Camic, P. M., Yong, K. X. X., Stott, J., & Crutch, S. J. (2024). "I want to do something" - exploring what makes activities meaningful for community-dwelling people living with dementia: A focused ethnographic study. *Qualitative Health Research, 34*(13), 1286–1302. https://doi.org/10.1177/10497323241239487

Heinrich, S., Laporte Uribe, F., Roes, M., Hoffmann, W., Thyrian, J. R., Wolf-Ostermann, K., & Holle, B. (2016). Knowledge management in dementia care networks: A qualitative analysis of successful information and support strategies for people with dementia living at home and their family caregivers. *Public Health, 131*, 40–48. https://doi.org/10.1016/j.puhe.2015.10.021

Helal, S., & Bull, C. N. (2019). From smart homes to smart-ready homes and communities. *Dementia and Geriatric Cognitive Disorders, 47*(3), 157–163. https://doi.org/10.1159/000497803

Heward, M., Innes, A., Cutler, C., & Hambidge, S. (2017). Dementia-friendly communities: Challenges and strategies for achieving stakeholder involvement. *Health & Social Care in the Community, 25*(3), 858–867. https://doi.org/10.1111/hsc.12371

Hicks, B., Innes, A., & Nyman, S. R. (2021). Experiences of rural life among community-dwelling older men with dementia and their implications for social inclusion. *Dementia (London), 20*(2), 444–463. https://doi.org/10.1177/1471301219887586

Huizenga, J., Scheffelaar, A., Bleijenberg, N., Wilken, J. P., Keady, J., & Van Regenmortel, T. (2023). What matters most: Exploring the everyday lives of people with dementia. *International Journal of Geriatric Psychiatry, 38*(8), Article e5983. https://doi.org/10.1002/gps.5983

Hung, L., Hudson, A., Gregorio, M., Jackson, L., Mann, J., Horne, N., & Phinney, A. (2021). Creating dementia-friendly communities for social inclusion: A scoping review. *Gerontology & Geriatric Medicine, 7*, Article 23337214211013596.

Innes, A., Chesterton, L., Morris, L., Smith, S. K., & Bushell, S. (2021). Perspectives of people living with dementia and their care partners about the impact on social health when participating in a co-designed dementia café. *Health & Social Care in the Community, 30*(4), e1375–e1383. https://doi.org/10.1111/hsc.13545

Jing, W., Willis, R., & Feng, Z. (2016). Factors influencing quality of life of elderly people with dementia and care implications: A systematic review. *Archives of Gerontology and Geriatrics, 66*, 23–41.

Kallitsis, P., Soilemezi, D., & Elliott, A. M. (2019). Disabling spaces and spatial strategies: Feminist approaches to the home environment of family caregivers of people with dementia. *Home Cultures, 15*(3), 265–287. https://doi.org/10.1080/17406315.2018.1690293

Kerssens, C., Kumar, R., Adams, A. E., Knott, C. C., Matalenas, L., Sanford, J. A., & Rogers, W. A. (2015). Personalized technology to support older adults with and without cognitive impairment living at home. *American Journal of Alzheimer's Disease and Other Dementias, 30*(1), 85–97. https://doi.org/10.1177/1533317514568338. Feb. Epub 2015 Jan 22. PMID: 25614507; PMCID: PMC4819239.

Krieger, N. (2001). Theories for social epidemiology in the 21st century: An ecosocial perspective. *International Journal of Epidemiology, 30*(4), 668–677.

Lanthier-Labonté, S., Chaudhury, H., Wong, J., & Hung, L. (2024). Dementia-friendly transportation services: A scoping review. *The Gerontologist, 64*(7), Article gnae047. https://doi.org/10.1093/geront/gnae047

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science, 5*, 69. https://doi.org/10.1186/1748-5908-5-69

Lipman, V., & Manthorpe, G. (2017). Social housing provision for minority ethnic older people with dementia: Findings from a qualitative study. *Dementia (London), 16*(6), 750–765. https://doi.org/10.1177/1471301215616539

Livingston, G., Sommerlad, A., Orgeta, V., Costafreda, S. G., Huntley, J., Ames, D., & Mukadam, N. (2017). Dementia prevention, intervention, and care. *The Lancet, 390*(10113), 2673–2734.

Lole, L., Conway, J., Oorloff, A., & Duffy, C. (2022). The role of day-respite centres in supporting people with dementia to age in place: An interpretive phenomenological study. *Health Promotion Journal of Australia, 34*(1), 193–201. https://doi.org/10.1002/hpja.652

Longstreth, M., McKibbin, C., Steinman, B., Worth, A. S., & Carrico, C. (2022). Exploring information and referral needs of individuals with dementias and informal caregivers in rural and remote areas. *Clinical Gerontologist, 45*(4), 808–820. https://doi.org/10.1080/07317115.2019.1710735

Macdonald, M., Martin-Misener, R., Weeks, L., Helwig, M., Moody, E., & MacLean, H. (2020). Experiences and perceptions of spousal/partner caregivers providing care for community-dwelling adults with dementia: A qualitative systematic review. *JBI Evidence Synthesis, 18*(4), 647–703. https://doi.org/10.11124/JBISRIR-2017-003774

Mahomed, A., & Pretorius, C. (2024). Giving voice to the voiceless: Understanding the perceived needs of dementia family carers in Soweto, a South African township. *Dementia (14713012), 23*(4), 622–642. https://doi.org/10.1177/14713012231151723

Maki, Y., Takao, M., Hattori, H., & Suzuki, T. (2020). Promoting dementia-friendly communities to improve the well-being of individuals with and without dementia. *Geriatrics & Gerontology International, 20*(6), 511–519. https://doi.org/10.1111/ggi.13896

Marston, H. R., & Van Hoof, J. (2019). "WHO doesn't think about technology when designing urban environments for older people?" A case study approach to a proposed extension of the WHO'S age-friendly cities model. *International Journal of Environmental Research and Public Health, 16*(19), 3525.

Meyer, O. L., Nguyen, K. H., Dao, T. N., Vu, P., Arean, P., & Hinton, L. (2015). The sociocultural context of caregiving experiences for Vietnamese dementia family caregivers. *Asian American Journal of Psychology, 6*(3), 263–272. https://doi.org/10.1037/aap0000024

Morton, T., Wong, G., Atkinson, T., & Brooker, D. (2021). Sustaining community-based interventions for people affected by dementia long term: The SCI-Dem realist review. *BMJ Open, 11*(7), Article e047789. https://doi.org/10.1136/bmjopen-2020-047789

Motta-Ochoa, R., Bresba, P., Castanheira, J. D., Kwan, C. L., Shaffer, S., Julien, O., … Blain-Moraes, S. (2021). "when I hear my language, I travel back in time and I feel at home": Intersections of culture with social inclusion and exclusion of persons with dementia and their caregivers. *Transcultural Psychiatry, 58*(6), 828–843. https://doi.org/10.1177/13634615211001707

Moyle, W., Venturto, L., Griffiths, S., Grimbeek, P., McAllister, M., Oxlade, D., & Murfield, J. (2011). Factors influencing quality of life for people with dementia: A qualitative perspective. *Aging & Mental Health, 15*(8), 970–977.

Musyimi, C. W., Ndetei, D. M., Evans-Lacko, S., Oliveira, D., Mutunga, E., & Farina, N. (2021). Perceptions and experiences of dementia and its care in rural Kenya. *Dementia (London), 20*(8), 2802–2819. https://doi.org/10.1177/14713012211014800

Nemec, M., & Girling, L. (2023). Living alone with dementia and navigating essential transportation needs. *Innovation in Aging, 7*(S1), 1175. https://doi.org/10.1093/geroni/igad104.3767

Nguyen, T., & Li, X. (2020). Understanding public-stigma and self-stigma in the context of dementia: A systematic review of the global literature. *Dementia, 19*(2), 148–181.

Nguyen, T. T. (2024). "Here, we describe them as forgetful, confused, and absent-minded": Dementia knowledge, stigma, and care plan among Vietnamese adults in rural areas. *Aging & Mental Health, 28*(6), 927–935. https://doi.org/10.1080/13607863.2023.2293053

Niedderer, K., Tournier, I., Orton, L., & Threlfall, S. (2023). I can do: Co-designing a service with and for people with dementia to engage with volunteering. *Social Sciences, 12*(6), 364. https://doi.org/10.3390/socsci12060364

Nouri, M., & Chaudhury, H. (2025). Built environment factors and their impacts on outdoor walking activity among people living with dementia: A spatial analysis approach. *Frontiers in Public Health, 13*, Article 1576548. https://doi.org/10.3389/fpubh.2025.1576548 Simon Fraser UniversityFrontiers

Nouri, M., & Chaudhury, H. (2025b). Twenty key insights into neighborhood walking experiences of people living with dementia in Metro Vancouver: A quantitative analysis of qualitative data. *Cities & Health. Advance online publication.*. https://doi.org/10.1080/23748834.2025.2520165

Novek, S., & Menec, V. (2022). Conceptualizing access to community-based supports from the perspectives of people living with young onset dementia, family members and providers. *Dementia, 22*(1), 180–196. https://doi.org/10.1177/14713012221138145

Omote, S., Ikeuchi, S., Okamoto, R., Takahashi, Y., & Koyama, Y. (2023). Experience with support at workplaces for people with young onset dementia: A qualitative evaluation of being open about dementia. *International Journal of Environmental Research and Public Health, 20*(13), 6235. https://doi.org/10.3390/ijerph20136235

Park, S., & Lee, Y. (2024). Non-pharmacological management of wandering in persons with dementia: An integrative review. *Psychogeriatrics, 24*(5), 1160–1167. https://doi.org/10.1111/psyg.13173

Parkinson, L., Sullivan, K. A., & Graham, K. (2022). On becoming a dementia-friendly community: An empirical study of the individual factors that predict openness towards dementia-friendly communities. *Dementia (London), 21*(6), 1971–1986. https://doi.org/10.1177/14713012221106328

Parsons, K., Smith-Young, J., & Pike, A. (2024). Understanding how community-dwelling persons with early dementia perceive health and community services: Informing the dementia strategy of Newfoundland and Labrador, Canada. *Dementia (London), 24*(1), 150–170. https://doi.org/10.1177/14713012241284693

Peoples, H., Varming, J., & Kristensen, H. K. (2022). Social citizenship when living with dementia: A qualitative meta-study. *Journal of Occupational Science, 30*(3), 453–471. https://doi.org/10.1080/14427591.2022.2061040

Peters, M. D., Godfrey, C., McInerney, P., Munn, Z., Tricco, A. C., & Khalil, H. (2020). Scoping reviews. *JBI manual for evidence synthesis, 10*, 10–46658. https://doi.org/10.46658/JBIMES-20-12

Phinney, A., Becker, M., Burnside, L., Malcolm, P., & Puurveen, G. (2023). Dementia without borders: Building community connections to reduce stigma and foster inclusion. *Dementia (London), 22*(3), 550–560. https://doi.org/10.1177/14713012231151723

Ploeg, J., Northwood, M., Duggleby, W., McAiney, C. A., Chambers, T., Peacock, S., … Triscott, J. A. (2020). Caregivers of older adults with dementia and multiple chronic conditions: Exploring their experiences with significant changes. *Dementia (London), 19*(8), 2601–2620. https://doi.org/10.1177/1471301219834423

Portacolone, E., Nguyen, T. T., Bowers, B. J., Johnson, J. K., Kotwal, A. A., Stone, R. I., … Covinsky, K. E. (2023). Perceptions of the role of living alone in providing services to patients with cognitive impairment. *JAMA Network Open, 6*(8), Article e2329913. https://doi.org/10.1001/jamanetworkopen.2023.29913

Pozo Menéndez, E., & Higueras García, E. (2022). Best practices from eight European dementia-friendly study cases of innovation. *International Journal of Environmental Research and Public Health, 19*(21), Article 14233. https://doi.org/10.3390/ijerph192114233

Queluz, F. N. F. R., Kervin, E., Wozney, L., Fancey, P., McGrath, P. J., & Keefe, J. (2020). Understanding the needs of caregivers of persons with dementia: A scoping review. *International Psychogeriatrics, 32*(1), 35–52. https://doi.org/10.1017/S1041610219000243

Quinn, C., Hart, N., Henderson, C., Litherland, R., Pickett, J., & Clare, L. (2021). Developing supportive local communities: Perspectives from people with dementia and caregivers participating in the IDEAL programme. *Journal of Aging & Social Policy, 34*(6), 839–859. https://doi.org/10.1080/08959420.2021.1973341

Renn, B. N., Wool, J. L., & Belza, B. (2021). A typical week with mild cognitive impairment. *The Gerontologist, 61*(7), 1095–1106. https://doi.org/10.1093/geront/gnab008

ResearchRabbit. (n.d.). *ResearchRabbit: AI-powered research discovery tool*. Retrieved 20-02-2025, from https://www.researchrabbit.ai/.

Røsvik, J., Michelet, M., Engedal, K., Bieber, A., Broda, A., Gonçalves-Pereira, M., … Selbæk, G. (2020). Interventions to enhance access to and utilization of formal community care services for home-dwelling persons with dementia and their informal carers: A scoping review. *Aging & Mental Health, 24*(2), 200–211. https://doi.org/10.1080/13607863.2018.1523876

Rowe, M., Houston, A., Molinari, V., Bulat, T., Bowen, M. E., Spring, H., … McKenzie, B. (2015). The concept of missing incidents in persons with dementia. *Healthcare (Basel), 3*(4), 1121–1132. https://doi.org/10.3390/healthcare3041121

Sari, D. W., Igarashi, A., Takaoka, M., Yamahana, R., Noguchi-Watanabe, M., Teramoto, C., & Yamamoto-Mitani, N. (2020). Virtual reality program to develop dementia-friendly communities in Japan. *Australasian Journal on Ageing, 39*(3), e352–e359. https://doi.org/10.1111/ajag.12797

Sbaffi, L. (2021). The information trust formation process for informal caregivers of people with dementia: A qualitative study. *Health Information and Libraries Journal, 38*(3), 208–222. https://doi.org/10.1111/hir.12331

Schneider, C., Nißen, M., Kowatsch, T., et al. (2024). Impact of digital assistive technologies on the quality of life for people with dementia: A scoping review. *BMJ Open, 14*, Article e080545. https://doi.org/10.1136/bmjopen-2023-080545

SciSpace. (n.d.). *SciSpace: AI chat for scientific PDFs*. Retrieved 20-02-2025, from https://scispace.com/.

Seetharaman, K., & Chaudhury, H. (2020). "I am making a difference": Understanding advocacy as a citizenship practice among persons living with dementia. *Journal of Aging Studies, 52*, Article 100831. https://doi.org/10.1016/j.jaging.2020.100831

Seetharaman, K., Shepley, M. M., & Cheairs, C. (2021). The saliency of geographical landmarks for community navigation: A photovoice study with persons living with dementia. *Dementia (London), 20*(4), 1191–1212. https://doi.org/10.1177/1471301220927236

Sehar, U., Rawat, P., Choudhury, M., Boles, A., Culberson, J., Khan, H., … Reddy, P. H. (2022). Comprehensive understanding of Hispanic caregivers: Focus on innovative methods and validations. *Journal of Alzheimer's Disease Reports, 7*(1), 557–574. https://doi.org/10.3233/ADR-220094

Shannon, K., Bail, K., & Neville, S. (2019). Dementia-friendly community initiatives: An integrative review. *Journal of Clinical Nursing, 28*(11–12), 2035–2045.

Silva, P. V. D. C., Silva, C. M. P. D., & Silveira, E. A. A. D. (2023). Family and the care of older adults with Alzheimer disease: A scoping review. *Escola Anna Nery, 27*, Article e20220313.

Silverman, M. (2021). Dementia-friendly neighbourhoods in Canada: A carer perspective. *Canadian Journal on Aging, 40*(3), 451–462. https://doi.org/10.1017/S0714980820000252

Smebye, K. L., Kirkevold, M., & Engedal, K. (2015). Ethical dilemmas concerning autonomy when persons with dementia wish to live at home: A qualitative, hermeneutic study. *BMC Health Services Research, 16*. https://doi.org/10.1186/s12913-015-1217-1

Smith, C., & Newbury, G. (2019). Palliative care for community patients diagnosed with dementia: A systematic review. *British Journal of Community Nursing, 24*(12), 570–575. https://doi.org/10.12968/bjcn.2019.24.12.570

Soilemezi, D., Drahota, A., Crossland, J., & Stores, R. (2019). The role of the home environment in dementia care and support: Systematic review of qualitative research. *Dementia (London), 18*(4), 1237–1272. https://doi.org/10.1177/1471301217692130

Sriram, V., Jenkinson, C., & Peters, M. (2019). Informal carers' experience of assistive technology use in dementia care at home: A systematic review. *BMC Geriatrics, 19*(1), 160. https://doi.org/10.1186/s12877-019-1169-0

Stevenson, M., & Taylor, B. J. (2018). Risk communication in dementia care: Family perspectives. *Journal of Risk Research, 21*(6), 692–709. https://doi.org/10.1080/13669877.2016.1235604

Stokols, D. (1992). Establishing and maintaining healthy environments: Toward a social ecology of health promotion. *American Psychologist, 47*(1), 6.

Sturge, J., Nordin, S., Patil, D. S., Jones, A., Légaré, F., Elf, M., & Meijering, L. (2021). Features of the social and built environment that contribute to the well-being of people with dementia who live at home: A scoping review. *Health & Place, 67*, Article 102483.

Tabatabaei-Jafari, H., Furst, M. A., Bagheri, N., D'Cunha, N. M., Bail, K., Sachdev, P. S., & Salvador-Carulla, L. (2024). The integrated atlas of dementia care in the Australian Capital Territory: A collective case study of local service provision. *Health Services Insights, 2024*, 1–10. https://doi.org/10.1177/11786329241232254

Taylor, J. S., Gray, M. S. F., Mar, C. M., Crane, P. K., Kariya, H., Freitag, C., … Larson, E. B. (2023). Kinless older adults with dementia: Qualitative analysis of data from the adult changes in thought study. *Journals of Gerontology. Series B, Psychological Sciences and Social Sciences, 78*(6), 1060–1072. https://doi.org/10.1093/geronb/gbad030

Thijssen, M., Daniels, R., Lexis, M., Jansens, R., Peeters, J., Chadborn, N., & Graff, M. (2021). How do community-based dementia-friendly initiatives work for people with dementia and their caregivers, and why? A rapid realist review. *International Journal of Geriatric Psychiatry, 37*(2).

Thomson, L., Stanyon, M., Dening, T., Heron, R., & Griffiths, A. (2019). Managing employees with dementia: A systematic review. *Occupational Medicine, 69*(2), 89–98. https://doi.org/10.1093/occmed/kqz003

Tournier, I., Orton, L., Dening, T., Ahmed, A., Holthoff-Detto, V., & Niedderer, K. (2023). An investigation of the wishes, needs, opportunities and challenges of accessing meaningful activities for people living with mild to moderate dementia. *International Journal of Environmental Research and Public Health, 20*(7), 5358. https://doi.org/10.3390/ijerph20075358

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine, 169*(7), 467–473.

Tronto, J. (2020). *Moral boundaries: A political argument for an ethic of care*. Routledge.

van Rijn, A., Meiland, F., & Dröes, R. M. (2019). Linking DemenTalent to meeting centers for people with dementia and their caregivers: A process analysis into facilitators and barriers in 12 Dutch meeting centers. *International Psychogeriatrics, 31*(10), 1433–1445. https://doi.org/10.1017/S1041610219001108

Verloo, H., Kampel, T., Vide, N., & Pereira, F. (2020). Perceptions about technologies that help community-dwelling older adults remain at home: A qualitative study. *Journal of Medical Internet Research, 22*(6). https://doi.org/10.2196/17930

Volkmer, A., Bruns, C., Zimmerer, V., Varley, R., & Beeke, S. (2023). Giving voice to people with dementia and their carers: The impact of communication difficulties on everyday conversations. *International Journal of Qualitative Methods, 22*, 1–15. https://doi.org/10.1177/16094069231171096

Vučković, M., & Adams, A. M. (2022). Population and health policies in urban areas. In J. F. May, & J. A. Goldstone (Eds.), *11. International handbook of population policies. International handbooks of population*. Cham: Springer. https://doi.org/10.1007/978-3-031-02040-7_18.

Wang, X. R., Liu, S. X., Robinson, K. M., Shawler, C., & Zhou, L. (2019). The impact of dementia caregiving on self-care management of caregivers and facilitators: A qualitative study. *Psychogeriatrics, 19*(1), 23–31. https://doi.org/10.1111/psyg.12372

Wang, Y., Li, L., Tian, S., Wu, J., & Wang, Z. (2020). Development and psychometric test of home environment assessment checklist for community-dwelling older adults with dementia. *Journal of Alzheimer's Disease, 77*(4), 1389–1396. https://doi.org/10.3233/JAD-200241

Ward, M. C., Milligan, C., Rose, E., Elliott, M., & Wainwright, B. R. (2021). The benefits of community-based participatory arts activities for people living with dementia: A thematic scoping review. *Arts & Health, 13*(3), 213–239. https://doi.org/10.1080/17533015.2020.1781217

Waymouth, M., Siconolfi, D., Friedman, E. M., Saliba, D., Ahluwalia, S. C., & Shih, R. A. (2023). Barriers and facilitators to home- and community-based services access for persons with dementia and their caregivers. *Journals of Gerontology: Social Sciences, 78*(6), 1085–1097. https://doi.org/10.1093/geronb/gbad039

White, E. B., & Montgomery, P. (2016). Supporting people with dementia to walk about safely outdoors: Development of a structured model of assessment. *Health & Social Care in the Community, 24*(4), 473–484. https://doi.org/10.1111/hsc.12226

World Health Organization. (2007a). *Global age-friendly cities: A guide*. Geneva, Switzerland: World Health Organization. ISBN 978–92–4-154730-7.

World Health Organization. (2007b). *Checklist of essential features of age-friendly cities*. Geneva, Switzerland: World Health Organization.

World Health Organization. (2021). Towards a dementia-inclusive society: WHO toolkit for dementia friendly initiatives (DFIs). https://apps.who.int/iris/bitstream/handle/10665/343780/9789240031531-eng.pdf?sequence=1.

Wrede, C., Braakman-Jansen, A., & van Gemert-Pijnen, L. (2022). How to create value with unobtrusive monitoring technology in home-based dementia care: A multimethod study among key stakeholders. *BMC Geriatrics, 22*(1), 921. https://doi.org/10.1186/s12877-022-03550-1

Wrede, C., Braakman-Jansen, A., & van Gemert-Pijnen, L. (2023). Understanding acceptance of contactless monitoring technology in home-based dementia care: A cross-sectional survey study among informal caregivers. *Frontiers in Digital Health, 5*, Article 1257009. https://doi.org/10.3389/fdgth.2023.1257009

Yin, G., Lin, S., & Chen, L. (2023). Risk factors associated with home care safety for older people with dementia: Family caregivers' perspectives. *BMC Geriatrics, 23*(1), 224. https://doi.org/10.1186/s12877-023-03587-9

Zamiri, M., Sarraipa, J., Luis-Ferreira, F., Manus, G. M., O'Brien, P., Camarinha-Matos, L. M., & Jardim-Goncalves, R. (2021). Review of technology-supported multimodal solutions for people with dementia. *Sensors, 21*(14), 4806. https://doi.org/10.3390/s21144806

Zhong, B.-L., & Chiu, H. F.-K. (2023). Ageism, dementia, and culture. *International Psychogeriatrics, 35*(1), 1–2. https://doi.org/10.1017/S1041610223000029

Zhou, Y., Berridge, C., Hooyman, N., Mroz, T. M., Sadak, T., Choi, S. W., & Phelan, E. A. (2024). Care partners' engagement in preventing falls for community-dwelling older people with dementia. *The Gerontologist, 64*(8). https://doi.org/10.1093/geront/gnae064

Zhou, Y., Thakkar, N., Phelan, E. A., Ishado, E., Li, C. Y., Borson, S., & Sadak, T. (2024). How do care partners overcome the challenges associated with falls of community-dwelling older people with dementia? A qualitative study. *Dementia (London), 23*(7), 1152–1171. https://doi.org/10.1177/14713012241267137

Zou, N., Chi, Y., He, D., Xie, B., & Wang, Z. (2022). Together they shall not fade away: Opportunities and challenges of self-tracking for dementia care. *Information Processing & Management, 59*(5), Article 103024.

Zwierenberg, E., Herman, H., Lukkien, D., Cornelisse, L., Finnema, E., Dijkstra, A., Hagedoorn, M., & Sanderman, R. (2018). A lifestyle monitoring system to support (in)formal caregivers of people with dementia: Analysis of users' needs, benefits, and concerns. *Gerontechnology, 17*(4), 194–205. https://doi.org/10.4017/gt.2018.17.4.001.00